# [MS-STANOICAL]:

# Outlook iCalendar Standards Support Version 2

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This document describes the choices made when implementing Exchange Internet Message Access Protocol (IMAP) Standard. It identifies ambiguities and implementer choices and indicates the approach taken in the implementation. The details of the implementation itself are described in the specifications for the relevant protocols or data structures, not in this document.

## Revision Summary

| Date | Revision History | Revision Class | Comments |
| --- | --- | --- | --- |
| 7/15/2009 | 1.0.0 | Major | Initial Availability. |
| 10/1/2008 | 1.1.0 | Minor | Updated IP notice. |
| 4/10/2009 | 2.0.0 | Major | Updated applicable product releases. |
| 7/15/2009 | 3.0.0 | Major | Revised and edited technical content. |
| 11/4/2009 | 3.0.1 | Editorial | Revised and edited the technical content. |
| 2/10/2010 | 3.0.1 | None | Version 3.0.1 release |
| 8/4/2010 | 3.1 | Minor | Clarified the meaning of the technical content. |
| 11/3/2010 | 3.2 | Minor | Clarified the meaning of the technical content. |
| 3/18/2011 | 3.3 | Minor | Clarified the meaning of the technical content. |
| 8/5/2011 | 3.3 | None | No changes to the meaning, language, or formatting of the technical content. |
| 10/7/2011 | 3.3 | None | No changes to the meaning, language, or formatting of the technical content. |
| 1/20/2012 | 4.0 | Major | Significantly changed the technical content. |
| 4/27/2012 | 4.0 | None | No changes to the meaning, language, or formatting of the technical content. |
| 7/16/2012 | 5.0 | Major | Significantly changed the technical content. |
| 10/8/2012 | 5.0 | None | No changes to the meaning, language, or formatting of the technical content. |
| 2/11/2013 | 6.0 | Major | Significantly changed the technical content. |
| 7/26/2013 | 6.1 | Minor | Clarified the meaning of the technical content. |
| 11/18/2013 | 6.1 | None | No changes to the meaning, language, or formatting of the technical content. |
| 2/10/2014 | 6.1 | None | No changes to the meaning, language, or formatting of the technical content. |
| 4/30/2014 | 6.1 | None | No changes to the meaning, language, or formatting of the technical content. |
| 7/31/2014 | 6.1 | None | No changes to the meaning, language, or formatting of the technical content. |
| 10/30/2014 | 6.1 | None | No changes to the meaning, language, or formatting of the technical content. |
| 5/26/2015 | 7.0 | Major | Significantly changed the technical content. |
| 9/14/2015 | 7.0 | None | No changes to the meaning, language, or formatting of the technical content. |
| 6/13/2016 | 7.0 | None | No changes to the meaning, language, or formatting of the technical content. |

# Table of Contents

# 1 Introduction

This document specifies the level of support provided by the Outlook iCalendar component for the Internet iCalendar Protocol (iCalendar), the iCalendar Transport-Independent Interoperability Protocol (iTIP), and the iCalendar Message-Based Interoperability Protocol (iMIP). The Outlook iCalendar component is used by clients that implement the iCalendar, iTIP, and iMIP protocols to store and retrieve calendar data on the server.

## 1.1 Glossary

This document uses the following terms:

**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].

**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].

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

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

**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).

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

**MIME content-type**: A content type that is as described in [RFC2045], [RFC2046], and [RFC2047].

**MIME entity**: An entity that is as described in [RFC2045], [RFC2046], and [RFC2047].

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

**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].

**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.

**round-trip**: A process that imports data and then exports that data without data loss.

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

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

**vCard**: A format for storing and exchanging electronic business cards, as described in [RFC2426].

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

## 1.2   References

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

### 1.2.1   Normative References

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

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

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

[RFC1847] Galvin, J., Murphy, S., Crocker, S., and Freed, N., "Security Multiparts for MIME: Multipart/Signed and Multipart/Encrypted", RFC 1847, October 1995, http://www.rfc-editor.org/rfc/rfc1847.txt

[RFC2045] Freed, N., and Borenstein, N., "Multipurpose Internet Mail Extensions (MIME) Part One: Format of Internet Message Bodies", RFC 2045, November 1996, http://www.rfc-editor.org/rfc/rfc2045.txt

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

[RFC2368] Hoffman, P., Masinter, L., and Zawinski, J., "The mailto URL scheme", RFC 2368, July 1998, http://www.rfc-editor.org/rfc/rfc2368.txt

[RFC2392] Levinson, E., "Content-ID and Message-ID Uniform Resource Locators", RFC 2392, August 1998, http://www.rfc-editor.org/rfc/rfc2392.txt

[RFC5545] Desruisseaux, B., Ed., "Internet Calendaring and Scheduling Core Object Specification (iCalendar)", RFC 5545, September 2009, http://www.rfc-editor.org/rfc/rfc5545.txt

[RFC5546] Daboo, C., Ed., "iCalendar Transport-Independent Interoperability Protocol (iTIP)", RFC 5546, December 2009, http://www.rfc-editor.org/rfc/rfc5546.txt

[RFC5750] Ramsdell, B., and Turner, S., "Secure/Multipurpose Internet Mail Extensions (S/MIME) Version 3.2 Certificate Handling", RFC 5750, January 2010, http://www.rfc-editor.org/rfc/rfc5750.txt

[RFC5751] Ramsdell, B., and Turner, S., "Secure/Multipurpose Internet Mail Extensions (S/MIME) Version 3.2 Message Specification", RFC 5751, January 2010, http://www.rfc-editor.org/rfc/rfc5751.txt

[RFC6047] Melnikov, A., Ed., "iCalendar Message-Based Interoperability Protocol (iMIP)", RFC 6047, December 2010, http://www.rfc-editor.org/rfc/rfc6047.txt

## 1.2.2 Informative References

[MSDN-XHistDocRep] Microsoft Corporation, "Exchange Server Protocols", http://msdn.microsoft.com/en-us/library/jj633113.aspx

[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

[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

[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

## 1.3 Microsoft Implementations

Microsoft Office Outlook 2007

Microsoft Outlook 2010

Microsoft Outlook 2013

Microsoft Outlook 2016

## 1.4 Standards Support Requirements

The conformance requirements for [RFC5545], [RFC5546], and [RFC6047] are simply that all required portions of the specifications are implemented according to the specification, and any optional portions that are implemented are implemented according to the specification.

The following table lists the sections of [RFC5545] that are considered normative and the sections that are considered informative.

| Section(s) | Normative/Informative |
|---|---|
| 1 – 3 | Informative |
| 3.1 – 3.8.8.3 | Normative |
| 4 | Informative |
| 5 – 8.3.12 | Normative |
| 9 – A.3 | Informative |

The following table lists the sections of [RFC5546] that are considered normative and the sections that are considered informative.

| Section(s) | Normative/Informative |
|---|---|
| 1 – 1.4 | Informative |
| 2 – 3.7.3 | Normative |
| 4 – 4.7.2 | Informative |
| 5 – 6.2.3 | Normative |

| Section(s) | Normative/Informative |
|---|---|
| 6.3 – 9.2 | Informative |

The following table lists the sections of [RFC6047] that are considered normative and the sections that are considered informative.

| Section(s) | Normative/Informative |
|---|---|
| 1 – 1.1 | Informative |
| 1.2 – 5.1 | Normative |
| 6 – Appendix B | Informative |

### 1.4.1   Obsolete Standards

The following table lists the obsolete standard specifications that have been replaced by newer specifications. This document applies to the current specifications. The last version of this document that applies to the obsolete specifications can be obtained from the Historical Document Repository ([MSDN-XHistDocRep]).

| Obsolete specification | Current specification |
|---|---|
| [RFC2445] | [RFC5545] |
| [RFC2446] | [RFC5546] |
| [RFC2447] | [RFC6047] |

### 1.5   Notation

The following notations are used in this specification.

| Notation | Explanation |
|---|---|
| C#### | This identifies a clarification of ambiguity in the target specification. This includes imprecise statements, omitted information, discrepancies, and errata. This does not include data formatting clarifications. |
| V#### | This identifies an intended point of variability in the target specification such as the use of MAY, SHOULD, or RECOMMENDED. This does not include extensibility points. |
| E#### | Because the use of extensibility points (such as optional implementation-specific data) may impair interoperability, this profile identifies such points in the target specification. |

# 2 Standards Support Statements

## 2.1 Normative Variations

The following subsections detail the normative variations from [RFC5545], [RFC5546], and [RFC6047].

### 2.1.1 [RFC5545] Section 3.3.8, Valid Range of INTEGER Value Type

The specification states the valid range for the **INTEGER** value type is -2147483648 to 2147483647.

Outlook has a valid range for the **INTEGER** value type of -2147483647 to 2147483647.

### 2.1.2 [RFC5545] Section 3.3.10, BYSECOND, BYMINUTE, and BYHOUR Rule Parts MUST Be Ignored in RECUR Value When DTSTART Has a DATE Value Type

The specification states, "The BYSECOND, BYMINUTE and BYHOUR rule parts MUST NOT be specified when the associated 'DTSTART' property has a DATE value type. These rule parts MUST be ignored in RECUR value that violate the above requirement (e.g., generated by applications that pre-date this revision of iCalendar)."

Outlook will fail to import iCalendar objects that contain **RECUR** values that contain a **BYSECOND**, **BYMINUTE**, or **BYHOUR** rule part.

### 2.1.3 [RFC5545] Section 3.6, iCalendar Object Requires at Least One Component

The specification states that an iCalendar object MUST include at least one calendar component.

Outlook can import and export iCalendar objects with no components.

### 2.1.4 [RFC5545] Section 3.6.1, VEVENT with No End Time Does Not Take Up Any Time

The specification states, "For cases where a 'VEVENT' calendar component specifies a 'DTSTART' property with a DATE value type but no 'DTEND' nor 'DURATION' property, the event's duration is taken to be one day. For cases where a 'VEVENT' calendar component specifies a 'DTSTART' property with a DATE-TIME value type but no 'DTEND' property, the event ends on the same calendar date and time of day specified by the 'DTSTART' property."

Outlook imports VEVENT calendar components that are missing both the **DURATION** and **DTEND** properties as ending one hour after their start time. For more details, see section 2.2.70.

### 2.1.5 [RFC5545] Section 3.8.2.2, DTEND MUST Be Later in Time Than DTSTART

The specification states, "The value type of this property MUST be the same as the 'DTSTART' property, and its value MUST be later in time than the value of the 'DTSTART' property."

Outlook can export iCalendar objects that have the same values for **DTSTART** and **DTEND**.

### 2.1.6 [RFC5545] Section 3.8.4.1, ATTENDEE MUST Be Present on Group-Scheduled Calendar Entities

The specification states, "This property MUST be specified in an iCalendar object that specifies a group-scheduled calendar entity."

Outlook does not export an **ATTENDEE** property on meetings in the following scenarios:

- When exporting a PUBLISH-type draft meeting that the user has not added any attendees to yet.

- When exporting an exception to an existing recurring meeting in which the attendee list was not modified. For more details, see [RFC5545].

### 2.1.7 [RFC5545] Section 3.8.4.1, ATTENDEE MUST NOT Be Present When Publishing Calendar Information

The specification states, "This property MUST NOT be specified in an iCalendar object when publishing the calendar information (e.g., NOT in an iCalendar object that specifies the publication of a calendar user's busy time, event, to-do or journal)."

Outlook can export **ATTENDEE** properties when exporting a calendar in the iCalendar format.

### 2.1.8 [RFC5545] Section 3.8.4.1, Delegate MUST Inherit RSVP and ROLE from Delegator

The specification states, "A recipient delegated a request MUST inherit the 'RSVP' and 'ROLE' values from the attendee that delegated the request to them."

On import, Outlook ignores the *DELEGATED-TO* and *DELEGATED-FROM* parameters on the **ATTENDEE** property. As a result, a delegate's **ATTENDEE** property does not inherit any values from the delegator's **ATTENDEE** property.

### 2.1.9 [RFC5545] Section 3.8.4.3, ORGANIZER MUST Be Present on Group-Scheduled Calendar Entities

The specification states, "This property MUST be specified in an iCalendar object that specifies a group-scheduled calendar entity."

Outlook does not export an **ORGANIZER** property on an exception to an existing recurring meeting in which the attendee list was not modified. For more details, see [RFC5545].

### 2.1.10 [RFC5545] Section 3.8.4.7, Implementations MUST Receive and Persist UID Values of at Least 255 Octets

The specification states, "Implementations MUST be able to receive and persist values of at least 255 octets for this property."

On import, Outlook may not be able to distinguish **UID** values longer than 202 bytes when using **message stores** other than Personal Folders (PST) or Offline Folders (OST).

### 2.1.11 [RFC5546] Section 3.2.1, ORGANIZER MUST Be Present in Published iCalendar Objects

The specification states, "The 'Organizer' MUST be present in a published iCalendar component."

Outlook can export VEVENT components with a method of PUBLISH that do not have an **ORGANIZER** property when the VEVENT does not represent a meeting.

### 2.1.12 [RFC5546] Section 3.2.1, ATTENDEEs MUST NOT Be Present in PUBLISH-Type iCalendar Objects

The specification states, "'Attendees' MUST NOT be present."

Outlook can export VEVENT components with a method of PUBLISH that have **ATTENDEE** properties when the VEVENT represents a meeting.

### 2.1.13 [RFC5546] Section 3.2.1, PUBLISH-Type iCalendar Objects MUST Contain One or More VEVENT Components

The table in [RFC5546] contains a value of "1+" in the Presence column for the VEVENT component.

Outlook can export an iCalendar object with a method of PUBLISH that has no VEVENT components when the user exports a calendar or calendar range containing no appointments.

### 2.1.14 [RFC5546] Section 3.2.1, VEVENT Components in PUBLISH-Type iCalendar Objects MUST Contain a SUMMARY Property

The table in [RFC5546] contains a value of "1" in the Presence column for the **SUMMARY** property within the VEVENT component.

Outlook can omit the **SUMMARY** property for VEVENT components representing semi-corrupt appointments or meetings.

### 2.1.15 [RFC5546] Section 3.2.2, VEVENT Components in REQUEST-Type iCalendar Objects MUST Contain One or More ATTENDEE Properties

The table in [RFC5546] contains a value of "1+" in the Presence column for the **ATTENDEE** property within the VEVENT component.

Outlook can omit the **ATTENDEE** properties when exporting a draft meeting.

### 2.1.16 [RFC5546] Section 3.2.2, VEVENT Components in REQUEST-Type iCalendar Objects MUST Contain a SUMMARY Property

The table in [RFC5546] contains a value of "1" in the Presence column for the **SUMMARY** property within the VEVENT component.

Outlook can omit the **SUMMARY** property for VEVENT components representing semi-corrupt appointments or meetings.

### 2.1.17 [RFC5546] Section 3.2.2.6, Forwarded REQUEST VEVENTs MUST NOT be Modified

The specification states, "When forwarding a 'REQUEST' to another CU, the forwarding 'Attendee' MUST NOT make changes to the original message."

Outlook changes the **ORGANIZER** property of the VEVENT to the calendar user that forwarded the request.

### 2.1.18 [RFC5546] Section 3.2.3, VEVENT Components in REPLY-Type iCalendar Objects MUST Contain an ORGANIZER Property

The table in [RFC5546] contains a value of "1" in the Presence column for the **ORGANIZER** property within the VEVENT component.

Outlook does not export the **ORGANIZER** property in the VEVENT component on REPLY-type iCalendar objects.

### 2.1.19 [RFC5546] Section 3.2.7, VEVENT Components in COUNTER-Type iCalendar Objects MUST Contain an ORGANIZER Property

The table in [RFC5546] contains a value of "1" in the Presence column for the **ORGANIZER** property within the VEVENT component.

Outlook does not export the **ORGANIZER** property in the VEVENT component on COUNTER-type iCalendar objects.

### 2.1.20 [RFC5546] Section 3.7.1, Updating DSTART of a Recurrence Instance Changes RECURRENCE-ID

The specification states, "If the 'Organizer' wishes to change the 'DTSTART', the original, unmodified 'DTSTART' value of the instance is used as the value 'RECURRENCE-ID' property, and the new 'DTSTART' and 'DTEND' values reflect the change."

After an instance's start time is changed, Outlook continues to reference that instance with a **RECURRENCE-ID** set to the original start time. On import, Outlook treats the value of **RECURRENCE-ID** as the original start time of the instance.

### 2.1.21 [RFC5546] Section 3.7.2, ORGANIZER MUST Be Present on Published VEVENT Components

The specification states, "The '**ORGANIZER**' property is required on published events…."

Outlook does not export an **ORGANIZER** property on PUBLISH-type VEVENT components when the VEVENT represents a meeting rather than an appointment.

### 2.1.22 [RFC6047] Section 2.2.2, Authentication MUST Be Performed Using S/MIME

The specification states, "Authentication MUST be performed using S/MIME [RFC5750] [RFC5751]."

Outlook provides no mechanism to sign or encrypt iMIP data. Outlook can attach .ics files to signed or encrypted e-mail.

On import, Outlook fails to render signed or encrypted iMIP data. Outlook can correctly render .ics files attached to signed or encrypted e-mail

### 2.1.23 [RFC6047] Section 2.3, ATTENDEE MUST Contain Proper mailto: URI

The specification states, "The calendar address specified within the 'ORGANIZER' and 'ATTENDEE' properties in an iCalendar object sent using iMIP MUST be a proper 'mailto:' [MAILTO] URI specification for the corresponding 'Organizer' or 'Attendee' of the 'VEVENT' or 'VTODO'."

Outlook exports a value of "invalid:nomail" in the **ATTENDEE** property for calendar users that do not have an e-mail address.

### 2.1.24 [RFC6047] Section 3, Applications MUST Support Signing and Encrypting text/calendar

The specification states, "Compliant applications MUST support signing and encrypting 'text/calendar' body parts using a mechanism based on S/MIME [RFC5750] [RFC5751] in order to facilitate the authentication the originator of the iCalendar object...."

Outlook does not support signing or encrypting iMIP messages and cannot process signed or encrypted iMIP messages. E-mail messages with .ics attachments that are signed and/or encrypted can be created and rendered properly.

**2.1.25 [RFC6047] Section 3, Implementations MUST Provide Mechanisms to Verify Authorization of "Working on Behalf"**

The specification states, "It is possible to receive iMIP messages sent by someone working on behalf of another 'Calendar User'. This is determined by examining the 'sent-by' parameter in the relevant 'ORGANIZER' or 'ATTENDEE' property. [iCAL] and [iTIP] provide no mechanism to verify that a 'Calendar User' has authorized someone else to work on their behalf. To address this security issue, implementations MUST provide mechanisms for the 'Calendar Users' to make that decision before applying changes from someone working on behalf of a 'Calendar User'."

Outlook provides no such mechanism and automatically process received iMIP messages that are sent by one calendar user on behalf of another.

## 2.2 Clarifications

The following subsections identify clarifications relative to [RFC5545], [RFC5546], and [RFC6047].

Unless otherwise stated, the specified products conform to all SHOULD and RECOMMENDED behavior in [RFC5545], [RFC5546], and [RFC6047]. The term "can" is used throughout [RFC5545] and is interpreted to indicate optional behavior.

### 2.2.1 [RFC5545] Section 3.1, Content Lines

V0001:

The specification states that content lines are delimited by a CRLF sequence.

Microsoft Office Outlook 2007, Microsoft Outlook 2010, Microsoft Outlook 2013, Microsoft Outlook 2016

On import, Outlook can parse files that use any combination of CRLF, CR, or LF as content line delimiters. On export, Outlook uses CRLF as the content line delimiter.

V0002:

The specification states, "Lines of text SHOULD NOT be longer than 75 octets, excluding the line break. Long content lines SHOULD be split into a multiple line representations using a line 'folding' technique."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook uses a CRLF followed by an HTAB character to fold lines and ensure no line is longer than 75 octets, as recommended. On import, Outlook parses any line regardless of length, and treats any of the following as a line fold: CR followed by SPACE or HTAB, LF followed by SPACE or HTAB, and CRLF followed by SPACE or HTAB.

V0003:

The specification uses Augmented Backus-Naur Form (**ABNF**) to define the format of content lines.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import and export, Outlook conforms to the ABNF rules specified. On import, Outlook attempts to salvage any content lines that do not conform to the ABNF rules in some scenarios, but in general ignores any lines that do not conform. Additionally, the following hexadecimal encodings are ignored on both import and export:

U+0000, U+0001, U+0002, U+0003, U+0004, U+0005, U+0006, U+0007, U+0008, U+000B, U+000C, U+000E, U+000F, U+0010, U+0011, U+0012, U+0013, U+0014, U+0015, U+0016,

U+0017, U+0018, U+0019, U+001A, U+001B, U+001C, U+001D, U+001E, U+001F, U+007F, and U+FEFF (**Note**: in UTF-8, the U+FEFF character is encoded as three octets: 0xEF, 0xBB, 0xBF.)

## 2.2.2   [RFC5545] Section 3.1.2, Multiple Values

V0004:

The specification states that multi-valued properties are generally encoded by creating a content line for each value, including the property name. It also describes an alternative encoding, a single content line with the multiple values separated by a COMMA character.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook always uses the single content line encoding method. On import, Outlook can parse either method, or a combination of both.

## 2.2.3   [RFC5545] Section 3.1.3, Binary Content

V0005:

The specification states that binary content should be referenced using a **Uniform Resource Identifier (URI)** within a property value, but, if this is not feasible, then it should be encoded with **base64 encoding** and included in the iCalendar entity.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

When exporting iCalendar information for use in a **MIME message**, Outlook references binary content with a cid: type URI. When exporting iCalendar information to a file, Outlook encodes binary content with base64 encoding.

When importing iCalendar information, Outlook imports all binary content that is encoded with base64 encoding. All non-cid: type URIs are imported as .url file type attachments. iMIP data is also imported with all attachments from the entire MIME structure, regardless of whether they are referenced by cid: type URIs. All cid: type URIs are ignored.

## 2.2.4   [RFC5545] Section 3.1.4, Character Set

V0006:

The specification states that the "charset" Content-Type parameter can be used to specify character sets other than UTF-8.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook ignores the "charset" Content-Type parameter on import, and sets it to "utf-8" on export. iCalendar data MUST be in UTF-8 format to be imported by Outlook. Outlook exports iCalendar data in UTF-8 format.

## 2.2.5   [RFC5545] Section 3.2, Property Parameters

C0001:

The specification defines a set of parameters but does not specify how to respond to undefined or unrecognized parameters.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook ignores any parameters that are undefined or unrecognized. It also ignores recognized parameters in unsupported contexts (for example, a *FMTTYPE* parameter on an **ATTENDEE** property).

On export, Outlook exports some xparams, as specified in [MS-OXCICAL].

### 2.2.6   [RFC5545] Section 3.2.1, Alternate Text Representation

C0002:

The specification is unclear on whether the *ALTREP* parameter is required or optional.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook ignores this parameter on import and does not export it.

### 2.2.7   [RFC5545] Section 3.2.2, Common Name

V0007:

The specification describes the optional *CN* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook only exports a *CN* parameter for the **ATTENDEE**, **ORGANIZER**, and **X-MS-OLK-SENDER** ([MS-OXCICAL] section 2.1.3.1.1.20.61) properties.

On import, Outlook ignores the CN parameter on any properties other than **ATTENDEE**, **ORGANIZER**, and **X-MS-OLK-SENDER**.

### 2.2.8   [RFC5545] Section 3.2.3, Calendar User Type

V0008:

The specification describes the optional *CUTYPE* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook only exports a *CUTYPE* parameter for the **ATTENDEE** property. If set, the only possible value is "RESOURCE".

On import, Outlook ignores the *CUTYPE* parameter on any properties other than **ATTENDEE**. Furthermore, values other than "RESOURCE" (case-insensitive) or "ROOM" (case-insensitive) are ignored.

### 2.2.9   [RFC5545] Section 3.2.4, Delegators

V0009:

The specification describes the optional *DELEGATED-FROM* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export this parameter and ignores it on import.

### 2.2.10 [RFC5545] Section 3.2.5, Delegatees

V0010:

The specification describes the optional *DELEGATED-TO* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export this parameter and ignores it on import.

## 2.2.11 [RFC5545] Section 3.2.6, Directory Entry Reference

V0011:

The specification describes the optional *DIR* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export this parameter and ignores it on import.

## 2.2.12 [RFC5545] Section 3.2.7, Inline Encoding

V0012:

The specification describes the optional *ENCODING* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports an *ENCODING* parameter for the **ATTACH** property, and the value is always "BASE64".

On import, Outlook ignores the *ENCODING* parameter on any non-text type property other than the **ATTACH** property. Furthermore, Outlook ignores any **ATTACH** property that does not have one of the following combinations of the *ENCODING* and *VALUE* parameters:

| ENCODING | VALUE |
|----------|--------|
| absent | absent |
| BASE64 | BINARY |

On import, the *ENCODING* parameter is ignored on text type properties unless it is set to "QUOTED-PRINTABLE".

## 2.2.13 [RFC5545] Section 3.2.8, Format Type

V0013:

The specification describes the optional *FMTTYPE* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports an *FMTTYPE* parameter for the **X-ALT-DESC** property ([MS-OXCICAL] section 2.1.3.1.1.20.27), and the parameter's value is "text/html".

On import, Outlook ignores the *FMTTYPE* parameter on any properties other than **X-ALT-DESC** and **ATTACH**. Furthermore, Outlook ignores any **X-ALT-DESC** properties with an *FMTTYPE* parameter other than "text/html" (case-insensitive).

## 2.2.14 [RFC5545] Section 3.2.9, Free/Busy Time Type

V0014:

The specification describes the optional *FBYTPE* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export this parameter and ignores it on import.

## 2.2.15 [RFC5545] Section 3.2.10, Language

V0015:

The specification describes the optional *LANGUAGE* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports a *LANGUAGE* parameter for the **SUMMARY** property.

On import, Outlook uses the value of the first *LANGUAGE* parameter found in a **SUMMARY**, **LOCATION**, or **DESCRIPTION** property within a VEVENT component. All other instances of the *LANGUAGE* parameter are ignored.

## 2.2.16 [RFC5545] Section 3.2.11, Group or List Membership

V0016:

The specification describes the optional *MEMBER* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export this parameter and ignores it on import.

## 2.2.17 [RFC5545] Section 3.2.12, Participation Status

V0017:

The specification describes the optional *PARTSTAT* parameter.

Office Outlook 2007

Office Outlook 2007 only exports the *PARTSTAT* parameter for **ATTENDEE** properties in iCalendar objects with a **METHOD** of "REPLY" or "COUNTER". The possible values of this parameter are: "DECLINED", "ACCEPTED", and "TENTATIVE".

On import, Office Outlook 2007 ignores all *PARTSTAT* parameters except those on **ATTENDEE** properties in iCalendar objects with a **METHOD** of "REPLY" or "COUNTER" (case-insensitive).

For iCalendar objects with a **METHOD** of "REPLY", Office Outlook 2007 fails to import the iCalendar object unless there is exactly one **ATTENDEE** property with a *PARTSTAT* parameter, and the value of the parameter is "ACCEPTED", "DECLINED", or "TENTATIVE" (case-insensitive).

For iCalendar objects with a **METHOD** of "COUNTER", Office Outlook 2007 fails to import the iCalendar object unless there is exactly one **ATTENDEE** property with a *PARTSTAT* parameter, and the value of the parameter is "ACCEPTED", "DECLINED", "TENTATIVE", or "NEEDS-ACTION" (case-insensitive).

Outlook 2010, Outlook 2013, Outlook 2016

Outlook 2010, Outlook 2013, and Outlook 2016 behave identically to Office Outlook 2007, with the following exceptions:

Outlook 2010, Outlook 2013, and Outlook 2016 also export the *PARTSTAT* parameter for **ATTENDEE** properties in iCalendar objects with a **METHOD** of "PUBLISH".

Outlook 2010, Outlook 2013, and Outlook 2016 import the *PARTSTAT* parameter for **ATTENDEE** properties in iCalendar objects with a **METHOD** of "PUBLISH".

### 2.2.18 [RFC5545] Section 3.2.13, Recurrence Identifier Range

V0018:

The specification describes the optional *RANGE* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export this parameter and ignores it on import.

### 2.2.19 [RFC5545] Section 3.2.14, Alarm Trigger Relationship

V0019:

The specification describes the optional *RELATED* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export this parameter and ignores it on import.

### 2.2.20 [RFC5545] Section 3.2.15, Relationship Type

V0020:

The specification describes the optional *RELTYPE* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export this parameter and ignores it on import.

### 2.2.21 [RFC5545] Section 3.2.16, Participation Role

V0021:

The specification describes the optional *ROLE* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports a *ROLE* parameter on the **ATTENDEE** property. The value of the parameter is "OPT-PARTICIPANT", "NON-PARTICIPANT", or absent.

On import, Outlook ignores the *ROLE* parameter on any property other than **ATTENDEE**. Furthermore, all *ROLE* parameters with values other than "OPT-PARTICIPANT" (case-insensitive) or "NON-PARTICIPANT" (case-insensitive) are ignored.

### 2.2.22 [RFC5545] Section 3.2.17, RSVP Expectation

V0022:

The specification describes the optional *RSVP* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports the *RSVP* parameter on the **ATTENDEE** property. The value of this parameter is "TRUE" or "FALSE".

On import, Outlook ignores the *RSVP* parameter on any property other than **ATTENDEE**. Furthermore, all *RSVP* parameters with values other than "TRUE" (case-insensitive) are ignored.

## 2.2.23 [RFC5545] Section 3.2.18, Sent By

V0023:

The specification describes the optional *SENT-BY* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export this parameter and ignores it on import.

## 2.2.24 [RFC5545] Section 3.2.19, Time Zone Identifier

V0024:

The specification describes the *TZID* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook exports the *TZID* parameter on any **DATE-TIME** property if the value is not in **UTC** or "floating" time.

On import, Outlook ignores the *TZID* parameter on any property that is not of type **DATE-TIME**. It also ignores the *TZID* parameter on any **DATE-TIME** property that has a value in UTC.

V0025:

The specification states that an individual VTIMEZONE calendar component MUST be specified for each unique *TZID* parameter value specified in the iCalendar object.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook conforms to this statement on export.

On import, if the iCalendar object does not have a VTIMEZONE component for a particular *TZID* parameter, then Outlook attempts to match the value in the *TZID* with a list of well-known VTIMEZONEs. If no match can be found, then Outlook uses the client's local time zone.

C0003:

The specification states that the SOLIDUS character as a prefix to the *TZID* parameter indicates that the *TZID* represents "a unique ID in a globally defined time zone registry (when such registry is defined)." It further notes that "the specification of globally unique time zone identifiers is not addressed by this document and is left for future study."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does no special parsing of the SOLIDUS character in the *TZID* parameter.

## 2.2.25 [RFC5545] Section 3.2.20, Value Data Types

V0026:

The specification describes the optional *VALUE* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook only exports the *VALUE* parameter for the following properties: **ATTACH**, **EXDATE**, **RDATE**, **DTSTART**, **DTEND**, and **RECURRENCE-ID**. For the **ATTACH** property, the value is either "BINARY" or absent. For the **EXDATE**, **RDATE**, **DTSTART**, **DTEND**, and **RECURRENCE-ID** properties, the value is either "DATE" or absent.

On import, Outlook ignores the *VALUE* parameter on all properties except for **ATTACH**. Furthermore, Outlook ignores any **ATTACH** properties that do not have one of the following combinations of the *ENCODING* and *VALUE* parameters:

| ENCODING | VALUE |
|----------|-------|
| absent   | absent |
| BASE64   | BINARY |

## 2.2.26 [RFC5545] Section 3.3, Property Value Data Types

V0027:

The specification states that if a property's value is not in the default type for that property, then the type MUST be explicitly specified with a *VALUE* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook ignores the *VALUE* parameter and only supports the default property types for all properties unless otherwise specified in this document.

## 2.2.27 [RFC5545] Section 3.3.1, Binary

V0028:

The specification describes the **BINARY** data type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook ignores any properties of type **BINARY** that do not use the "BASE64" value for the *ENCODING* parameter. Outlook also ignores any properties of type **BINARY** that contain characters that are invalid in base64 encoding. Outlook attempts to parse values that are improperly padded, but ignores the property if it cannot parse the value.

## 2.2.28 [RFC5545] Section 3.3.2, Boolean

V0029:

The specification describes the **BOOLEAN** data type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook always use either "TRUE" or "FALSE" for the values.

On import, Outlook's handling of illegal values for BOOLEAN properties is documented on a property-by-property basis in this specification.

## 2.2.29 [RFC5545] Section 3.3.3, Calendar User Address

V0030:

The specification describes the **CAL-ADDRESS** data type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook either uses a MAILTO URI, as specified in [RFC2368], or the string "invalid:nomail".

On import, Outlook's handling of illegal values for **CAL-ADDRESS** properties is documented on a property-by-property basis in this specification.

### 2.2.30 [RFC5545] Section 3.3.4, Date

V0031:

The specification describes the **DATE** data type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook parses any valid value in **DATE** or **DATE-TIME** format, as specified in [RFC5545]. Outlook attempts to approximate the value of invalid **DATE** or **DATE-TIME** values. If it cannot approximate the value, then it ignores the property.

Outlook treats any date before January 1, 1601, and any date after December 31, 4500, as invalid.

### 2.2.31 [RFC5545] Section 3.3.5, Date-Time

V0032:

The specification describes the **DATE-TIME** data type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook parses any valid value in **DATE** or **DATE-TIME** format, as specified in [RFC5545]. Outlook attempts to approximate the value of invalid **DATE** or **DATE-TIME** values. If it cannot approximate the value, then it ignores the property.

Outlook treats any date before January 1, 1601, and any date after December 31, 4500, as invalid.

V0033:

The specification states that a time value MUST ONLY specify 60 seconds when specifying the periodic "leap second" in the time value.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not support "leap seconds." A value of 60 seconds is approximated as 59 seconds.

### 2.2.32 [RFC5545] Section 3.3.6, Duration

V0034:

The specification describes the **DURATION** data type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook attempts to approximate the value of invalid **DURATION** values. If it cannot approximate the value, then it ignores the property.

### 2.2.33 [RFC5545] Section 3.3.7, Float

V0035:

The specification describes the **FLOAT** data type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export any **properties** of type **FLOAT**, and it ignores any **properties** of type **FLOAT** on import.

### 2.2.34 [RFC5545] Section 3.3.8, Integer

V0036:

The specification describes the **INTEGER** data type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook ignores invalid **INTEGER** properties.

### 2.2.35 [RFC5545] Section 3.3.9, Period of Time

V0037:

The specification describes the **PERIOD** data type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export any properties of type **PERIOD**, and it ignores any properties of type **PERIOD** on import.

### 2.2.36 [RFC5545] Section 3.3.10, Recurrence Rule

V0038:

The specification describes the **RECUR** data type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only supports a subset of the recurrences specified in this section. For more details about the recurrences supported by Outlook, see [MS-OXCICAL] section 2.1.3.2.

On import, Outlook attempts to approximate recurrences that it does not support as one of its supported recurrences. If it cannot approximate it, then the entire VEVENT component is ignored.

### 2.2.37 [RFC5545] Section 3.3.11, Text

V0039:

The specification describes the **TEXT** data type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook's behavior varies depending on the value of the *ENCODING* parameter of the property.

If the property has a value of "QUOTED-PRINTABLE" (case-insensitive) in the *ENCODING* parameter, Outlook interprets the data as specified in [RFC2045], with the following deviations:

- In cases where [RFC2045] recommends that implementations warn the user regarding bad Quoted-Printable encodings, Outlook approximates the text without warning the user.

- If Outlook encounters an "=" and either of the next two characters is not a hexadecimal digit, Outlook will treat the "=" literally. In the same circumstance, [RFC2045] would recommend that the "=" and its following character be treated literally. As an example, the [RFC2045] approximation would decode "E==4Dc^2" as "E==4Dc^2", but Outlook would decode it as "E=Mc^2".

If the value does not conform to [RFC2045], the value is approximated.

If the property does not have an *ENCODING* parameter, or has a value other than "QUOTED-PRINTABLE" in the *ENCODING* parameter, then Outlook interprets the data as specified in [RFC5545], with the following additions:

- "\r" or "\R" are parsed as a newline (U+000D U+000A).

- "\"" are parsed as a double-quote (U+0022).

- "\'" are parsed as a single-quote (U+0027).

- Backslashes not handled by these rules or any of the rules as specified in [RFC5545], are parsed literally (U+005C).

### 2.2.38 [RFC5545] Section 3.3.12, Time

V0040:

The specification describes the **TIME** data type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook parses any valid value in **TIME** format, as specified in [RFC5545]. Outlook attempts to approximate the value of invalid **TIME** values. If it cannot approximate the value, then it ignores the property.

V0041:

The specification states that a time value MUST ONLY specify 60 seconds when specifying the periodic "leap second" in the time value.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not support "leap seconds." A value of 60 seconds is approximated as 59 seconds.

### 2.2.39 [RFC5545] Section 3.3.13, URI

V0042:

The specification describes the **URI** data type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

The only type of URI that Outlook exports is the "cid:" type URI, as specified in [RFC2392].

On import, Outlook ignores any **URI** type properties that are not of a valid format, or do not use one of the protocols in the following list:

http, https, ftp, mailto, news, oms, webcals, webcal, stssync, outlookfeed, outlookfeeds, tel, callto, im, sip, conf, meet, oba, onenote, file (to a local file), msn, nntp, pnm, mms, outlook, stssync

### 2.2.40 [RFC5545] Section 3.3.14, UTC Offset

V0043:

The specification describes the **UTC-OFFSET** data type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook attempts to approximate the value of invalid **UTC-OFFSET** values. If it cannot approximate the value, then it ignores the property.

### 2.2.41 [RFC5545] Section 3.4, iCalendar Object

V0044:

The specification allows multiple iCalendar objects to be sequentially grouped together.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook only exports one VCALENDAR component per iCalendar file or **MIME part**.

On import, Outlook can parse iCalendar files with multiple VCALENDAR components. However, only the properties of the first VCALENDAR component are used.

### 2.2.42 [RFC5545] Section 3.5, Property

V0045:

The specification imposes no ordering of properties within an iCalendar object.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook always orders properties before sub-components.

On import, Outlook parses properties and sub-components in any order, provided that the component hierarchy is correct.

V0046:

The specification specifies that property names, parameter names, and enumerated parameter values are case-insensitive.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook always uses capital letters for property names, parameter names, component names, and enumerated values.

### 2.2.43 [RFC5545] Section 3.6, Calendar Components

V0047:

The specification imposes no ordering of components within an iCalendar object.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook always exports VTIMEZONE components before VEVENT components.

On import, Outlook parses any ordering of components within an iCalendar object. Unsupported components or supported components in unsupported locations (for example, a VCALENDAR component within a VEVENT component) are ignored.

## 2.2.44 [RFC5545] Section 3.6.2, To-do Component

V0048:

The specification describes the VTODO component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VTODO components and ignores them on import.

## 2.2.45 [RFC5545] Section 3.6.3, Journal Component

V0049:

The specification describes the VJOURNAL component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VJOURNAL components and ignores them on import.

## 2.2.46 [RFC5545] Section 3.6.4, Free/Busy Component

V0050:

The specification describes the VFREEBUSY component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VFREEBUSY components and ignores them on import.

## 2.2.47 [RFC5545] Section 3.6.5, Time Zone Component

V0051:

The specification describes the VTIMEZONE component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook attempts to approximate VTIMEZONE components to a VTIMEZONE with one annually-recurring standard-to-Daylight Saving transition date, and one annually-recurring Daylight Saving-to-standard transition date. The approximation process is specified in [MS-OXCICAL] section 2.1.3.1.1.19. Only the following properties are used to approximate a VTIMEZONE, all other properties are ignored: **TZID** (in VTIMEZONE components), **DTSTART** (in DAYLIGHT or STANDARD components), **RRULE** (in DAYLIGHT or STANDARD components), **TZOFFSETFROM** (in DAYLIGHT or STANDARD components), and **TZOFFSETTO** (in DAYLIGHT or STANDARD components). If a time zone cannot be approximated or parsed, it is ignored.

## 2.2.48 [RFC5545] Section 3.6.6, Alarm Component

V0052:

The specification states that the **ACTION** property is required on VALARM components, and describes the possible values of the **ACTION** property of the VALARM component. The possible values specified are "AUDIO", "DISPLAY", "EMAIL", and "PROCEDURE". The format for the VALARM component is specified for each possible value of the **ACTION** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports VALARM components with the **ACTION** property set to "DISPLAY". The other types ("AUDIO", "EMAIL", and "PROCEDURE") are not implemented by Outlook.

On import, Outlook ignores the **ACTION** property of the VALARM component. All VALARM components are treated as a **reminder** ([MS-OXORMDR]).

V0053:

The specification states that the **TRIGGER** property is required on VALARM components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook ignores any VALARM components that do not have a **TRIGGER** property.

V0054:

The specification states that the **DURATION** and **REPEAT** properties are optional on VALARM components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export **DURATION** or **REPEAT** properties on VALARM components. On import, these properties are ignored on VALARM components.

V0055:

The specification states that the **ATTACH** property is optional for VALARM components that have the **ACTION** property set to "AUDIO" or "EMAIL", and is required for VALARM components that have the **ACTION** property set to "PROCEDURE".

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not implement VALARM components with the **ACTION** property set to "AUDIO", "EMAIL", or "PROCEDURE". Outlook does not export the **ATTACH** property on VALARM components. On import, this property is ignored on VALARM components.

V0056:

The specification states that VALARM components can optionally have additional **x-prop** properties set on them.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export any **x-prop** properties on VALARM components. On import, any **x-prop** properties on VALARM components are ignored.

V0057:

The specification states that the **DESCRIPTION** property is required for VALARM components with the **ACTION** property set to "DISPLAY" or "EMAIL", and optional for VALARM components with the **ACTION** property set to "PROCEDURE".

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook ignores the **DESCRIPTION** property.

V0058:

The specification states that the **SUMMARY** property is required for VALARM components with the **ACTION** property set to "EMAIL".

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VALARM components with the **ACTION** property set to "EMAIL". Therefore, it does not export the **SUMMARY** property on VALARM components.

On import, Outlook ignores the **SUMMARY** property.

V0059:

The specification states that the **ATTENDEE** property is required for VALARM components with the **ACTION** property set to "EMAIL".

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VALARM components with the **ACTION** property set to "EMAIL". Therefore, it does not export the **ATTENDEE** property on VALARM components.

On import, Outlook ignores the **ATTENDEE** property.

C0004:

The specification states, "When the action is 'AUDIO', the alarm can also include one and only one 'ATTACH' property, which MUST point to a sound resource, which is rendered when the alarm is triggered." It is unclear whether "which is rendered when the alarm is triggered" is a normative requirement.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

This is interpreted as a recommendation, not a requirement. Outlook ignores the **ATTACH** property on VALARM components.

C0005:

The specification states, "When the action is 'DISPLAY', the alarm MUST also include a 'DESCRIPTION' property, which contains the text to be displayed when the alarm is triggered." It is unclear whether "to be displayed when the alarm is triggered" is a normative requirement.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

This is interpreted as a recommendation, not a requirement. On import, Outlook ignores the **DESCRIPTION** property on VALARM components.

C0006:

The specification states, "When the action is 'EMAIL', the alarm MUST include a 'DESCRIPTION' property, which contains the text to be used as the message body, a 'SUMMARY' property, which contains the text to be used as the message subject, and one or more 'ATTENDEE' properties, which contain the email address of attendees to receive the message. It can also include one or more 'ATTACH' properties, which are intended to be sent as message attachments. When the alarm is triggered, the email message is sent." It is unclear whether "when the alarm is triggered, the email message is sent" is a normative requirement.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

This is interpreted as a recommendation, not a requirement. On import, Outlook ignores the **DESCRIPTION**, **SUMMARY**, **ATTENDEE**, and **ATTACH** properties. Outlook does not send e-mail messages when alarms are triggered.

V0060:

The specification states that VALARM components must only appear within VEVENT or VTODO components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports VALARM components within VEVENT components. On import, any VALARM components found outside of a VEVENT component are ignored.

V0061:

The specification states that multiple mutually independent VALARM components can be specified for a single VEVENT or VTODO component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports at most one VALARM component per VEVENT component. On import, Outlook uses the first VALARM component with a valid **TRIGGER** property found in a VEVENT component. All other VALARM components within that VEVENT are ignored.

V0062:

The specification states that the **TRIGGER** edge may be explicitly set to be relative to the **START** or **END** of a VEVENT or VTODO with the *RELATIVE* parameter on the **TRIGGER** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export or import the *RELATIVE* parameter of the **TRIGGER** property.

V0063:

The specification states that the **TRIGGER** property can alternatively be set to an absolute calendar date and time of day value.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the *VALUE* parameter of the **TRIGGER** property. On import, if the value of the **TRIGGER** property is not a **DURATION** type as specified in [RFC5545] Section 3.3.6, then Outlook ignores the VALARM component.

V0064:

The specification states that, if an alarm is set to trigger on the **START** of an event or to-do, then the **DTSTART** property MUST be present in the associated event or to-do.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook can successfully parse the event or to-do if there is no **DTSTART** property. For more details, see section 2.2.70.

V0065:

The specification states that, if an alarm is set to trigger on the **END** of an event, then either the **DTEND** property MUST be present, or the **DTSTART** and **DURATION** properties MUST both be present.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook can successfully parse the event even if **DTEND** and **DURATION** are both missing. For more details, see section 2.2.70.

V0066:

The specification states that an alarm in a VTODO component that is set to trigger on the **END** of the to-do either MUST have the **DUE** property, or MUST have both **DTSTART** and **DURATION**.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export or import VTODO components.

V0067:

The specification states that an alarm can be defined such that it triggers repeatedly, using the **DURATION** and **REPEAT** properties on the VALARM component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export repeating alarms. On import, Outlook ignores the **DURATION** and **REPEAT** properties on VALARM components.

V0068:

The specification states that it is typically the responsibility of the Calendar User Agent to deliver the alarm in the specified fashion.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook ignores the **ACTION** property on VALARM components. All VALARM components are treated as a reminder ([MS-OXORMDR]).

C0007:

The specification states, "In an AUDIO alarm, if the optional 'ATTACH' property is included, it MUST specify an audio sound resource. The intention is that the sound will be played as the alarm effect. If an 'ATTACH' property is specified that does not refer to a sound resource, or if the specified sound resource cannot be rendered (because its format is unsupported, or because it cannot be retrieved), then the CUA or other entity responsible for playing the sound may choose a fallback action, such as playing a built-in default sound, or playing no sound at all." It is unclear whether "the intention is that the sound will be played as an alarm effect" is a normative requirement.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

This is interpreted as a recommendation, not a requirement. On import, Outlook ignores the **ATTACH** property on VALARM components.

C0008:

The specification states, "In a DISPLAY alarm, the intended alarm effect is for the text value of the 'DESCRIPTION' property to be displayed to the user." It is unclear whether "the intended alarm effect is for the text value of the 'DESCRIPTION' property to be displayed to the user" is a normative requirement.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

This is interpreted as a recommendation, not a requirement. On import, Outlook ignores the **DESCRIPTION** property on VALARM components.

C0009:

The specification states, "In an EMAIL alarm, the intended alarm effect is for an email message to be composed and delivered to all the addresses specified by the 'ATTENDEE' properties in the 'VALARM' calendar component. The 'DESCRIPTION' property of the 'VALARM' calendar component MUST be used as the body text of the message, and the 'SUMMARY' property MUST be used as the subject text. Any 'ATTACH' properties in the 'VALARM' calendar component SHOULD be sent as attachments to the message." It is unclear whether "the intended alarm effect is for an email message to be composed and delivered to all the addresses specified by the 'ATTENDEE' properties in the 'VALARM' calendar component" is a normative requirement.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

This is interpreted as a recommendation, not a requirement. On import, Outlook ignores the **DESCRIPTION**, **SUMMARY**, **ATTENDEE**, and **ATTACH** properties. Outlook does not send e-mail messages when alarms are triggered.

## 2.2.49 [RFC5545] Section 3.7, Calendar Properties

C0010:

The specification states that these properties do not appear within a calendar component. They SHOULD be specified after the **BEGIN:VCALENDAR** property and prior to any calendar component. This is ambiguous because "calendar component" can refer to the VCALENDAR itself, or to any of the sub-components within the VCALENDAR component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

This statement is interpreted as applying to sub-components of the VCALENDAR, and not the VCALENDAR itself.

On export, Outlook does not export the **CALSCALE** property at all, and does not export the **METHOD**, **PRODID**, or **VERSION** properties anywhere beside the VCALENDAR component.

On import, Outlook ignores any of these properties outside of the VCALENDAR component.

## 2.2.50 [RFC5545] Section 3.7.1, Calendar Scale

V0069:

The specification describes the **CALSCALE** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the **CALSCALE** property. Outlook ignores the **CALSCALE** property and any parameters on the **CALSCALE** property on import.

## 2.2.51 [RFC5545] Section 3.7.2, Method

V0070:

The specification states that non-standard property parameters can be specified on the **METHOD** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export non-standard property parameters on the **METHOD** property, and ignores any non-standard property parameters on the **METHOD** property on import.

V0071:

The specification states that the **METHOD** property can be specified in an iCalendar object, and that it can only appear once.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, if there is no **METHOD** property, then Outlook treats the iCalendar object as if the **METHOD** property was set to PUBLISH ([RFC5546] section 3.2.1). If multiple **METHOD** properties are specified on a VCALENDAR, then Outlook ignores any **METHOD** properties beyond the first.

V0072:

The specification states that, in a MIME message entity, the value of the **METHOD** property MUST be the same as the value of the Content-Type "*method*" parameter. Furthermore, if either the **METHOD** property or the Content-Type "*method*" parameter is present, then the other MUST also be present.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook conforms to this requirement.

On import, if the value of the **METHOD** property is not the same as the value of the Content-Type "*method*" parameter, then the value of the **METHOD** property is used to evaluate the iCalendar object. Furthermore, if the value of the Content-Type "*method*" parameter is not "REQUEST", "REPLY", "CANCEL", or "COUNTER" (case-insensitive), then the MIME part is not parsed as an iCalendar object, and is treated as an attachment instead.

C0011:

The specification states, "If this property is not present in the iCalendar object, then a scheduling transaction MUST NOT be assumed. In such cases, the iCalendar object is merely being used to transport a snapshot of some calendar information; without the intention of conveying a scheduling semantic."

Office Outlook 2007, Outlook 2010

If the **METHOD** property is not present, then Outlook treats the iCalendar object as if the **METHOD** property were set to PUBLISH ([RFC5546] section 3.2.1). This conforms to the requirement that a scheduling transaction MUST NOT be assumed.

V0073:

The specification sets no limitation on the possible values of the **METHOD** property beyond the ABNF notation:

```
method     = "METHOD" metparam ":" metvalue CRLF
metparam   = *(";" other-param)
metvalue   = iana-token
```

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only implements the following values of the **METHOD** property: "PUBLISH", "REQUEST", "REPLY", "CANCEL", and "COUNTER", as specified in [RFC5546]. Outlook only exports these values for the **METHOD** property. On import, if the **METHOD** property is missing or set to an unimplemented value, then Outlook treats the iCalendar object as if the value were "PUBLISH".

## 2.2.52 [RFC5545] Section 3.7.3, Product Identifier

V0074:

The specification states that non-standard property parameters can be specified on the **PRODID** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export non-standard property parameters on the **PRODID** property, and ignores all parameters on the **PRODID** property on import.

V0075:

The specification states that the **PRODID** property MUST be specified once in an iCalendar object.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook can import iCalendar objects missing a **PRODID** property. If multiple **PRODID** properties are found, then the **PRODID** properties beyond the first are ignored.

V0076:

The specification states that the vendor of an implementation SHOULD assure that this is a globally unique identifier.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook sets this to "-//Microsoft Corporation//Outlook 12.0 MIMEDIR//EN".

On import, Outlook can parse the iCalendar object incorrectly if the **PRODID** incorrectly imitates the **PRODID** of an earlier version of Outlook. For more details, see [MS-OXCICAL] section 2.1.3.2.4.

V0077:

The specification states that the **PRODID** property SHOULD not be used to alter the interpretation of an iCalendar object beyond the semantics, as specified in [RFC5545].

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook alters its interpretation of an iCalendar object based on this property. For more details, see [MS-OXCICAL] section 2.1.3.2.4.

## 2.2.53 [RFC5545] Section 3.7.4, Version

V0078:

The specification states that non-standard property parameters can be specified on the **VERSION** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export non-standard property parameters on the **VERSION** property, and ignores all parameters on the **VERSION** property on import.

V0079:

The specification states that the **VERSION** property MUST be specified by an iCalendar object, but MUST be specified only once.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook treats an iCalendar object with a missing **VERSION** property as if the **VERSION** property were set to "2.0". If multiple **VERSION** properties are found, then any **VERSION** properties beyond the first are ignored.

V0080:

The specification states that a value of "2.0" for the **VERSION** property corresponds to [RFC5545].

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook sets the **VERSION** property to "2.0".

On import, Outlook treats any value of **VERSION** other than "1.0" as if it were set to "2.0". If the value is set to "1.0", then the data is not parsed as an iCalendar, and is instead redirected to Outlook's vCalendar parser.

C0012:

The specification uses the terms maxver and minver within the ABNF notation used to describe the format of the **VERSION** property. These terms are described as "A IANA registered iCalendar version identifier."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook fails to parse **VERSION** properties that specify both a minver and maxver. In this scenario, the **VERSION** property is ignored and Outlook uses a default value of "2.0".

Because no versions other than "2.0" are currently registered with IANA, Outlook's behavior is conformant with this section. However, if another version were to be registered with IANA, Outlook's behavior would no longer be conformant.

## 2.2.54 [RFC5545] Section 3.8.1.1, Attachment

V0081:

The specification states that the default value type for the **ATTACH** property is URI, and that the value type can be set to **BINARY** to indicate inline binary encoded content information.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook imports all binary attachments that have a value type of **BINARY** and are encoded with base64 encoding. All cid: URIs are ignored. All invalid and non-cid: URIs are imported as .url file attachments.

V0082:

The specification states that non-standard, inline encoding, format type and value data type property parameters can be specified on the **ATTACH** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook exports the *VALUE*, *ENCODING*, and *X-FILENAME* parameters on the **ATTACH** property. For more details, see [MS-OXCICAL] sections 2.2.1.20.1.1, 2.2.1.20.1.3, and 2.2.1.20.1.4.

On import, if the **ATTACH** property has a *VALUE* parameter set to **BINARY** and an *ENCODING* parameter set to BASE64, then the attachment is imported as binary data. If the **ATTACH** property has no *ENCODING* parameter and does not have a *VALUE* parameter set to **BINARY**, the attachment is imported as URI data. **ATTACH** properties that do not match these two scenarios are ignored. If any *X-FILENAME* parameters are present, then only the first instance is used in the user interface ([MS-OXCICAL] section 2.1.3.1.1.20.1.4). Any other parameters are ignored.

V0083:

The specification states that the **ATTACH** property can be specified within the VEVENT, VTODO, VJOURNAL, or VALARM components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports the **ATTACH** property within VEVENT components. On import, **ATTACH** properties in any component other than a VEVENT component are ignored.

C0013:

The specification uses ABNF notation to describe the format of the **ATTACH** property. The ABNF shows a particular order for the parameters, but it is unclear whether this order is required.

```
    attach      = "ATTACH" attachparam ( ":" uri ) /
                  (
                    ";" "ENCODING" "=" "BASE64"
                    ";" "VALUE" "=" "BINARY"
                    ":" binary
                  )
                  CRLF

    attachparam = *(
                  ;
                  ; The following is OPTIONAL for a URI value,
                  ; RECOMMENDED for a BINARY value,
                  ; and MUST NOT occur more than once.
                  ;
                  (";" fmttypeparam) /
                  ;
                  ; The following is OPTIONAL,
                  ; and MAY occur more than once.
                  ;
                  (";" other-param)
                  ;
                  )
```

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook orders the parameters for the **ATTACH** property differently than shown in this ABNF notation.

On import, Outlook can parse the parameters for the **ATTACH** property regardless of order.

## 2.2.55 [RFC5545] Section 3.8.1.2, Categories

V0084:

The specification states that non-standard and language property parameters can be specified on the **CATEGORIES** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export non-standard or language property parameters on the **CATEGORIES** property, and ignores all parameters on the **CATEGORIES** property on import.

V0085:

The specification states that the **CATEGORIES** property can be specified within the VEVENT, VTODO, or VJOURNAL components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports the **CATEGORIES** property within VEVENT components. On import, **CATEGORIES** properties in any component other than a VEVENT component are ignored.

V0086:

The specification states that multiple categories can be specified as a list of categories separated by the COMMA character (US-ASCII decimal 44).

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook exports at most one **CATEGORIES** property per VEVENT component. The value of the **CATEGORIES** property can contain multiple categories, which are separated by commas.

On import, Outlook can parse multiple instances of the **CATEGORIES** property on a single VEVENT component. When parsing the list of categories, Outlook applies additional rules to the values, including truncation of whitespace and removal of duplicates. These additional rules are specified in [MS-OXCICAL] section 2.1.3.1.1.20.3.

## 2.2.56 [RFC5545] Section 3.8.1.3, Classification

V0087:

The specification states that non-standard property parameters can be specified on the **CLASS** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export non-standard property parameters on the **CLASS** property, and ignores all parameters on the **CLASS** property on import.

V0088:

The specification states that the **CLASS** property can be specified within the VEVENT, VTODO, or VJOURNAL components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports the **CLASS** property within VEVENT components. On import, **CLASS** properties in any component other than a VEVENT component are ignored.

V0089:

The specification lists the possible values for the **CLASS** property as "PUBLIC", "PRIVATE", "CONFIDENTIAL", iana-token, or x-name.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook can set the following values of the **CLASS** property: "PUBLIC", "PRIVATE", "CONFIDENTIAL", and "X-PERSONAL".

On import, Outlook imports the first **CLASS** property with a value of "PUBLIC", "PRIVATE", "CONFIDENTIAL", or "X-PERSONAL" (case-insensitive). If no such **CLASS** property exists, Outlook treats the value of **CLASS** as "PUBLIC".

## 2.2.57 [RFC5545] Section 3.8.1.4, Comment

V0090:

The specification states that non-standard, alternate text representation, and language property parameters can be specified on the **COMMENT** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export parameters on the **COMMENT** property, and ignores all parameters on the **COMMENT** property on import.

V0091:

The specification states that the **COMMENT** property can be specified within the VEVENT, VTODO, VJOURNAL, VTIMEZONE, or VFREEBUSY components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports the **COMMENT** property within VEVENT components, and only when the **METHOD** property for the iCalendar object is "REPLY" or "COUNTER".

On import, **COMMENT** properties in any component other than a VEVENT component are ignored. Furthermore, all **COMMENT** properties are ignored when the **METHOD** property for the iCalendar object is anything other than "REPLY" or "COUNTER".

V0092:

The specification states that the **COMMENT** property can be specified multiple times.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook only exports at most one **COMMENT** property. On import, if more than one **COMMENT** property exists in a VEVENT component, then Outlook ignores all but the first.

## 2.2.58 [RFC5545] Section 3.8.1.5, Description

V0093:

The specification states that non-standard, alternate text representation, and language property parameters can be specified on the **DESCRIPTION** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export parameters on the **DESCRIPTION** property.

On import, Outlook only uses the first *LANGUAGE* parameter found in a **SUMMARY**, **LOCATION**, or **DESCRIPTION** property of a VEVENT component. In all other cases, parameters on the **DESCRIPTION** property are ignored.

V0094:

The specification states that the **DESCRIPTION** property can be specified within the VEVENT, VTODO, VJOURNAL, or VALARM components, and may be specified multiple times in a VJOURNAL component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can export at most one **DESCRIPTION** property on a VEVENT component. Outlook exports exactly one **DESCRIPTION** property on a VALARM component, and the value is "Reminder". Outlook does not export a **DESCRIPTION** property for any component other than a VEVENT or VALARM.

On import, if multiple **DESCRIPTION** properties are present in a VEVENT component, then Outlook ignores all but the first. Outlook ignores **DESCRIPTION** properties on any component other than a VEVENT.

## 2.2.59 [RFC5545] Section 3.8.1.6, Geographic Position

V0095:

The specification describes the **GEO** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not implement the **GEO** property. Outlook does not export or import this property.

C0014:

The specification does not explicitly state that implementing this property is required. It states: "This property can be specified in 'VEVENT' or 'VTODO' calendar components." Later, it states: "The

longitude and latitude values MAY be specified up to six decimal places, which will allow for accuracy to within one meter of geographical position. Receiving applications MUST accept values of this precision and MAY truncate values of greater precision."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

The phrase "receiving applications MUST accept values" is interpreted as being required contingent on actually implementing this property. The phrase "this property can be specified" is interpreted to mean that the property is optional.

## 2.2.60 [RFC5545] Section 3.8.1.7, Location

V0096:

The specification states that non-standard, alternate text representation, and language property parameters can be specified on the **LOCATION** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export parameters on the **LOCATION** property.

On import, Outlook only uses the first *LANGUAGE* parameter found in a **SUMMARY**, **LOCATION**, or **DESCRIPTION** property of a VEVENT component. In all other cases, parameters on the **LOCATION** property are ignored.

V0097:

The specification states that the **LOCATION** property can be specified within VEVENT or VTODO components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports **LOCATION** only on VEVENT components. On import, Outlook ignores **LOCATION** outside of VEVENT components.

V0098:

The specification states that an alternate representation may be specified as a URI that points to directory information.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not import or export the *ALTREP* parameter on the **LOCATION** property.

## 2.2.61 [RFC5545] Section 3.8.1.8, Percent Complete

V0099:

The specification describes the **PERCENT-COMPLETE** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not implement the **PERCENT-COMPLETE** property. Outlook does not export or import the **PERCENT-COMPLETE** property.

## 2.2.62 [RFC5545] Section 3.8.1.9, Priority

V0100:

The specification states that non-standard property parameters can be specified on the **PRIORITY** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export or import any parameters on the **PRIORITY** property.

V0101:

The specification states that the **PRIORITY** property can be specified within VEVENT or VTODO components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports **PRIORITY** only on VEVENT components. On import, Outlook ignores **PRIORITY** outside of VEVENT components.

V0102:

The specification states that the value of **PRIORITY** is specified as an integer in the range of zero to 9, with zero being an undefined priority, 1 being the highest priority, and 9 being the lowest priority.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports a value for **PRIORITY** of 1, 5, or 9. On import, Outlook can import any value between 1 and 9, inclusive. Any other value is ignored.

V0103:

The specification states that a client with a three-level priority scheme of "HIGH", "MEDIUM", and "LOW" is mapped as follows: 1-4 is "HIGH", 5 is "MEDIUM", and 6-9 is "LOW".

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook implements a three-level priority scheme and conforms to this statement.

V0104:

The specification describes how to implement a priority scheme of "A1", "A2", "A3", "B1", "B2", ..., "C3".

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not implement this priority scheme.

## 2.2.63 [RFC5545] Section 3.8.1.10, Resources

V0105:

The specification states that non-standard, alternate text representation, and language property parameters can be specified on the **RESOURCES** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook imports and exports no parameters on the **RESOURCES** property.

V0106:

The specification states that the **RESOURCES** property can be specified within VEVENT or VTODO components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports **RESOURCES** only on VEVENT components. On import, Outlook ignores **RESOURCES** outside of VEVENT components.

V0107:

The specification states that multiple resources can be specified as a list of resources separated by the COMMA character (US-ASCII decimal 44).

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook exports at most one **RESOURCES** property per VEVENT component. The value of the **RESOURCES** property can contain multiple resources, which are separated by commas.

On import, Outlook can parse multiple instances of the **RESOURCES** property on a single VEVENT component. When parsing the list of resources, Outlook applies additional rules to the values, including truncation of whitespace and removal of duplicates. These additional rules are specified in [MS-OXCICAL] section 2.1.3.1.1.20.21.

## 2.2.64 [RFC5545] Section 3.8.1.11, Status

V0108:

The specification states that non-standard property parameters can be specified on the **STATUS** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the **STATUS** property. On import, Outlook ignores all parameters on the **STATUS** property.

V0109:

The specification states that the **STATUS** property can be specified within the VEVENT, VTODO, or VJOURNAL components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the **STATUS** property.

On import, Outlook imports the **STATUS** property on a VEVENT component if it has no **TRANSP**, **X-MICROSOFT-CDO-BUSYSTATUS**, or **X-MICROSOFT-MSNCALENDAR-BUSYSTATUS** properties ([MS-OXCICAL] section 2.1.3.1.1.20.23). All other instances of the **STATUS** property are ignored.

## 2.2.65 [RFC5545] Section 3.8.1.12, Summary

V0110:

The specification states that non-standard, alternate text representation, and language property parameters can be specified on the **SUMMARY** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports the *LANGUAGE* parameter on the **SUMMARY** property. On import, Outlook only uses the first *LANGUAGE* parameter found in a **SUMMARY**, **LOCATION**, or **DESCRIPTION** property of a VEVENT component. In all other cases, parameters on the **SUMMARY** property are ignored.

V0111:

The specification states that the **SUMMARY** property can be specified within the VEVENT, VTODO, VJOURNAL, or VALARM components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports **SUMMARY** properties on VEVENT components. On import, Outlook ignores any **SUMMARY** properties outside of a VEVENT component.

## 2.2.66 [RFC5545] Section 3.8.2.1, Date-Time Completed

V0112:

The specification describes the **COMPLETED** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not implement the **COMPLETED** property. Outlook does not import or export the **COMPLETED** property.

## 2.2.67 [RFC5545] Section 3.8.2.2, Date-Time End

V0113:

The specification states that the default value type for **DTEND** is **DATE-TIME**, but it can be set to a **DATE** type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can export **DTEND** as **DATE-TIME** or **DATE**. On import, it can import value types of **DATE-TIME** or **DATE**. If the value cannot be parsed as either a **DATE-TIME** or **DATE**, then the property is ignored.

V0114:

The specification states that the value type of this property MUST be the same as the **DTSTART** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Within a given VEVENT component, Outlook exports **DTSTART** and **DTEND** as the same value data type in the same format. On import, Outlook can import different value data types and formats for **DTSTART** and **DTEND**.

**Note:** Outlook only supports floating time in the context of all-day appointments, which have a floating start time that occurs at midnight on one day, and a floating end time that occurs at midnight of another day. If a VEVENT has a floating **DTSTART** or **DTEND**, but is not an all-day appointment, the floating time is converted to local time in the user's time zone.

V0115:

The specification states that non-standard, value data type, and time-zone identifier property parameters can be specified on the **DTEND** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook exports the *VALUE* parameter if **DTEND** is a **DATE**. Outlook exports the *TZID* parameter if the **DTEND** is not a UTC or floating time.

On import, Outlook ignores all parameters on **DTEND** except *TZID*.

V0116:

The specification states that the **DTEND** property can be specified within VEVENT or VFREEBUSY components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports the **DTEND** property on VEVENT components. On import, any instances of **DTEND** outside of a VEVENT component are ignored.

V0117:

The specification states that on VEVENT components, the value of **DTEND** must be later than the value of **DTSTART**.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook can import VEVENT components that have equal values for **DTEND** and **DTSTART**. If **DTEND** is earlier than **DTSTART**, Outlook swaps the values on import.

See section 2.1.5 for export behavior.

## 2.2.68 [RFC5545] Section 3.8.2.3 Date-Time Due

V0118:

The specification describes the **DUE** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not import or export the **DUE** property.

## 2.2.69 [RFC5545] Section 3.8.2.4 Date-Time Start

V0119:

The specification states that the default value type for **DTSTART** is **DATE-TIME**, but it can be set to a **DATE** type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can export **DTSTART** as **DATE-TIME** or **DATE**. On import, it can import value types of **DATE-TIME** or **DATE**. If the value cannot be parsed as either a **DATE-TIME** or **DATE**, the property is ignored.

V0120:

The specification states that non-standard, value data type, and time-zone identifier property parameters can be specified on the **DTSTART** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook exports the *VALUE* parameter if **DTSTART** is a **DATE**. Outlook exports the *TZID* parameter if the **DTSTART** is not a UTC or floating time.

On import, Outlook ignores all parameters on **DTSTART** except *TZID*.

V0121:

The specification states that the **DTSTART** property can be specified within VEVENT, VTODO, VFREEBUSY, or VTIMEZONE components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports the **DTSTART** property on VEVENT, STANDARD, and DAYLIGHT components. On import, any instances of **DTSTART** outside of a VEVENT, STANDARD, or DAYLIGHT component are ignored.

V0122:

The specification states that **DTSTART** is REQUIRED on VEVENT components, and that events can have a start date/time but no end date/time. In that case, the event does not take up any time.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook can parse VEVENTs with a missing **DTSTART** property. The following table lists the import behavior when **DTSTART**, **DTEND**, **DURATION**, or any combination of these three are missing:

| Missing Properties | Start | End |
| --- | --- | --- |
| None | **DTSTART** | **DTEND** |
| **DTSTART** | **DTEND** – **DURATION** | **DTEND** |
| **DTEND** | **DTSTART** | **DTSTART** + **DURATION** |
| **DURATION** | **DTSTART** | **DTEND** |
| **DTSTART**, **DTEND** | Current Hour at time of import | Current Hour at time of import + **DURATION** |
| **DTSTART**, **DURATION** | **DTEND** – 1 Hour | **DTEND** |
| **DTEND**, **DURATION**, **DTSTART** is not floating or does not fall on midnight | **DTSTART** | **DTSTART** + 1 Hour |
| **DTEND**, **DURATION**, **DTSTART** is floating and falls on midnight | **DTSTART** | **DTSTART** + 1 Hour |
| **DTSTART**, **DTEND**, **DURATION** | Current Hour at time of import | Current Hour at time of import + 1 Hour |

V0123:

The specification describes the usage of **DTSTART** in VFREEBUSY components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not import or export VFREEBUSY components.

V0124:

The specification states that the **DTSTART** property is REQUIRED within the STANDARD and DAYLIGHT subcomponents of the VTIMEZONE component, and MUST be specified as a local **DATE-TIME** with no *TZID* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook ignores any STANDARD or DAYLIGHT subcomponent that does not have a **DTSTART** property. If a **DTSTART** in a STANDARD or DAYLIGHT subcomponent is specified in UTC or with a *TZID* parameter, Outlook approximates it as local time.

## 2.2.70 [RFC5545] Section 3.8.2.5 Duration

V0125:

The specification states that non-standard property parameters can be specified on the **DURATION** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the **DURATION** property. On import, Outlook ignores all parameters on the **DURATION** property.

V0126:

The specification states that the **DURATION** property can be specified within VEVENT, VTODO, VFREEBUSY, or VALARM components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the **DURATION** property. On import, Outlook ignores all instances of the **DURATION** property outside of a VEVENT component.

V0127:

The specification states that in a VEVENT component, the **DURATION** property may be used to specify the duration of an event instead of an explicit end date/time.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the **DURATION** property. On import, Outlook can import the **DURATION** property if the **DTSTART** or **DTEND** properties are missing. See section 2.2.70 for more details.

V0128:

The specification states that in a VTODO component, the **DURATION** property may be used to specify a duration for the to-do instead of an explicit due date/time.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not import or export VTODO components.

V0129:

The specification states that in a VFREEBUSY component, the **DURATION** property may be used to specify the interval of free time being requested.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not import or export VFREEBUSY components.

V0130:

The specification states that in a VALARM component, the **DURATION** property may be used to specify the delay period prior to repeating an alarm.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the **DURATION** property. On import, Outlook ignores the **DURATION** property on VALARM components.

V0131:

The specification uses ABNF notation to describe the format of the **DURATION** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the **DURATION** property. On import, Outlook ignores any value of the **DURATION** property that is negative or otherwise does not conform to the ABNF notation, as specified in [RFC5545] Section 3.8.2.5.

## 2.2.71 [RFC5545] Section 3.8.2.6 Free/Busy Time

V0132:

The specification describes the **FREEBUSY** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not implement the **FREEBUSY** property. Outlook does not import or export the **FREEBUSY** property.

## 2.2.72 [RFC5545] Section 3.8.2.7 Time Transparency

V0133:

The specification states that non-standard property parameters can be specified on the **TRANSP** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export any parameters on the **TRANSP** property. On import, Outlook ignores all parameters on the **TRANSP** property.

V0134:

The specification states that the **TRANSP** property can be specified once in a VEVENT component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can export at most one **TRANSP** property in a VEVENT component. On import, if more than one **TRANSP** property exists in a VEVENT component, Outlook imports the first valid value and ignores the rest.

V0135:

The specification states "Events that consume actual time for the individual or resource associated with the calendar SHOULD be recorded as OPAQUE, allowing them to be detected by free/busy time searches. Other events, which do not take up the individual's (or resource's) time SHOULD be recorded as TRANSPARENT, making them invisible to free/busy time searches."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports a **TRANSP** property set to "OPAQUE" for a **Calendar object's** "Busy", "Tentative", and "Out of Office" states. Outlook exports a **TRANSP** property set to "TRANSPARENT" for a Calendar object's "Free" state.

On import, Outlook ignores the **TRANSP** property if an **X-MICROSOFT-CDO-BUSYSTATUS** or an **X-MICROSOFT-MSNCALENDAR-BUSYSTATUS** property is present in the VEVENT. Otherwise, Outlook imports a value of "OPAQUE" as "Busy" and a value of "TRANSPARENT" as "Free". See [MS-OXCICAL] section 2.1.3.1.1.20.25 for more information.

## 2.2.73 [RFC5545] Section 3.8.3.1 Time Zone Identifier

V0136:

The specification states that non-standard property parameters can be specified on the **TZID** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export any parameters on the **TZID** property. On import, Outlook ignores all parameters on the **TZID** property.

V0137:

The specification states that the **TZID** property MUST be specified in a VTIMEZONE component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports exactly one **TZID** property in a VTIMEZONE component. On import, Outlook ignores any VTIMEZONE without a **TZID** property. If multiple **TZID** properties are specified within a VTIMEZONE, Outlook ignores all but the first.

V0138:

The specification states that the presence of a SOLIDUS character as a prefix indicates that the **TZID** represents an unique ID in a globally defined time zone registry.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export **TZID** properties with a SOLIDUS prefix. On import, Outlook performs no special handling of **TZID** properties prefixed with a SOLIDUS character.

V0139:

The specification states "This document does not define a naming convention for time zone identifiers. Implementers may want to use the naming conventions defined in existing time zone specifications such as the public-domain TZ database [TZDB]. The specification of globally unique time zone identifiers is not addressed by this document and is left for future study."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook relies on the operating system for time zone names. On import, Outlook makes no assumptions regarding the naming convention used to name a time zone in the **TZID** property.

## 2.2.74 [RFC5545] Section 3.8.3.2 Time Zone Name

V0140:

The specification describes the **TZNAME** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not implement the **TZNAME** property. Outlook does not import or export the **TZNAME** property.

## 2.2.75 [RFC5545] Section 3.8.3.3 Time Zone Offset From

V0141:

The specification states that non-standard property parameters can be specified on the **TZOFFSETFROM** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports no parameters on the **TZOFFSETFROM** property. On import, Outlook ignores all parameters on the **TZOFFSETFROM** property.

V0142:

The specification states that the **TZOFFSETFROM** property MUST be specified in a VTIMEZONE component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports exactly one **TZOFFSETFROM** property on each STANDARD and DAYLIGHT subcomponent of the VTIMEZONE component.

On import, if a STANDARD or DAYLIGHT subcomponent is missing the **TZOFFSETFROM** property, the import of the VTIMEZONE continues without error.

V0143:

The specification states that the **TZOFFSETFROM** property MUST only be specified in a VTIMEZONE component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports **TZOFFSETFROM** within STANDARD or DAYLIGHT subcomponents of the VTIMEZONE component. On import, any **TZOFFSETFROM** properties outside of STANDARD or DAYLIGHT subcomponents of a VTIMEZONE are ignored.

V0144:

The specification uses ABNF notation to describe the format of the **TZOFFSETFROM** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook attempts to approximate the value of **TZOFFSETFROM** values that do not conform to the ABNF, as specified in [RFC5545] Section 3.8.3.3. If the value cannot be approximated, it is ignored.

## 2.2.76 [RFC5545] Section 3.8.3.4 Time Zone Offset To

V0145:

The specification states that non-standard property parameters can be specified on the **TZOFFSETTO** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports no parameters on the **TZOFFSETTO** property. On import, Outlook ignores all parameters on the **TZOFFSETTO** property.

V0146:

The specification states that the **TZOFFSETTO** property MUST be specified in a VTIMEZONE component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports exactly one **TZOFFSETTO** property on each STANDARD and DAYLIGHT subcomponent of the VTIMEZONE component.

On import, if a STANDARD or DAYLIGHT subcomponent is missing the **TZOFFSETTO** property, Outlook attempts to approximate the value. If the value cannot be approximated it is ignored.

V0147:

The specification uses ABNF notation to describe the format of the **TZOFFSETTO** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook attempts to approximate the value of **TZOFFSETTO** values that do not conform to the ABNF, as specified in [RFC5545] Section 3.8.3.3. If the value cannot be approximated, it is ignored.

## 2.2.77 [RFC5545] Section 3.8.3.5 Time Zone URL

V0148:

The specification describes the **TZURL** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not implement the **TZURL** property. Outlook does not import or export the **TZURL** property.

## 2.2.78 [RFC5545] Section 3.8.4.1 Attendee

V0149:

The specification states that non-standard, language, calendar user type, group or list membership, participation role, participation status, RSVP expectation, delegatee, delegator, sent by, common name or directory entry reference property parameters can be specified on the **ATTENDEE** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can export the *CN*, *CUTYPE*, *ROLE*, *RSVP*, and *PARTSTAT* parameters on the **ATTENDEE** property. On import, Outlook can import the *CN*, *CUTYPE*, *ROLE*, *RSVP*, and *PARTSTAT* parameters on the **ATTENDEE** property. All other parameters are ignored.

V0150:

The specification states that the **ATTENDEE** property MUST be specified on group scheduled calendar entities.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can import a VEVENT representing a meeting request that has no **ATTENDEE** properties and does not declare the user as the **ORGANIZER**. In this case, the user is treated as an attendee.

V0151:

The specification states that the **ATTENDEE** property MUST NOT be specified in an iCalendar object when publishing the calendar information.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook can successfully import iCalendar objects with **METHOD** set to "PUBLISH" containing **ATTENDEE** and **ORGANIZER** properties. Outlook can correctly render the resulting meetings whether or not the user is a participant.

V0152:

The specification states that the **ATTENDEE** property is not specified in an iCalendar object that specifies only a time zone definition or that defines calendar entities that are not group scheduled entities, but are entities only on a single user's calendar.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export iCalendar objects that only specify a time zone definition. Outlook does not export the **ATTENDEE** property for VEVENT components that do not represent meetings.

On import, Outlook imports an iCalendar object that only specifies a time zone definition as an empty **Calendar folder**. If a VEVENT contains one or more **ATTENDEE** properties, Outlook imports it as a meeting.

V0153:

The specification states that the **ATTENDEE** property MUST only be used to specify participants, non-participants, and the chair of a group scheduled calendar entity.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports the **ATTENDEE** property for participants and non-participants. On import, Outlook treats all **ATTENDEE** properties as participants or non-participants.

V0154:

The specification states that the **ATTENDEE** property is used within an EMAIL category of the VALARM component to specify an email address that is to receive an email when the alarm is triggered.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export EMAIL-type VALARM components. On import, Outlook ignores the **ATTENDEE** property on VALARM components.

V0155:

The specification states that the *CN*, *ROLE*, *PARTSTAT*, *RSVP*, *CUTYPE*, *MEMBER*, *DELEGATED-TO*, *DELEGATED-FROM*, *SENT-BY*, and *DIR* parameters can be specified on **ATTENDEE** properties within VEVENT, VTODO, or VJOURNAL components, and that they MUST NOT be specified on **ATTENDEE** properties within a VFREEBUSY or VALARM component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports **ATTENDEE** properties within VEVENT components. On import, Outlook ignores all **ATTENDEE** properties outside of VEVENT components.

V0156:

The specification states that a recipient delegated a request MUST inherit the *RSVP* and *ROLE* values from the attendee that delegated the request to them.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the *DELEGATED-FROM* or *DELEGATED-TO* parameters. See section 2.1.8 for Outlook's import behavior.

V0157:

The specification states that a recipient delegated a request MUST inherit the *RSVP* and *ROLE* values from the attendee that delegated the request to them.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the *DELEGATED-FROM* or *DELEGATED-TO* parameters. See section 2.1.8 for Outlook's import behavior.

## 2.2.79 [RFC5545] Section 3.8.4.2 Contact

V0158:

The specification states that non-standard, alternate text representation, and language property parameters can be specified on the **CONTACT** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export any parameters on the **CONTACT** property. On import, Outlook ignores all parameters on the **CONTACT** property.

V0159:

The specification states that the **CONTACT** property can be specified in VEVENT, VTODO, VJOURNAL, or VFREEBUSY components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can export the **CONTACT** property on VEVENT components. On import, Outlook ignores any **CONTACT** properties outside of a VEVENT component.

V0160:

The specification states that an alternative representation for the property value can be specified that refers to a URI pointing to an alternate form, such as a **vCard**, for the contact information.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the *ALTREP* parameter. On import, Outlook ignores the *ALTREP* parameter.

## 2.2.80 [RFC5545] Section 3.8.4.3 Organizer

V0161:

The specification states that non-standard, language, common name, directory entry reference, and sent by property parameters can be specified on the **ORGANIZER** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports the *CN* parameter on the **ORGANIZER** property. On import, Outlook imports the *CN* parameter and ignores all other parameters on the **ORGANIZER** property.

V0162:

The specification states that the **ORGANIZER** property MUST be specified in an iCalendar object that specifies a group scheduled calendar entity.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, if a VEVENT component has no **ORGANIZER** property, Outlook uses the user as the organizer.

C0015:

The specification states "This property MUST be specified in an iCalendar object that specifies the publication of a calendar user's busy time."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

It is assumed that "an iCalendar object that specifies the publication of a calendar user's busy time" refers to a VFREEBUSY component. Outlook does not export or import VFREEBUSY components.

V0163:

The specification states that the **ORGANIZER** property MUST NOT be specified in an iCalendar object that specifies only a time zone definition or that defines calendar entities that are not group scheduled entities, but are entities only on a single user's calendar.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export iCalendar objects that only specify a time zone definition. Outlook does not export the **ORGANIZER** property for VEVENT components that do not represent meetings.

On import, Outlook imports an iCalendar object that only specifies a time zone definition as an empty Calendar folder. If a VEVENT contains an **ORGANIZER** property, Outlook imports it as a meeting.

## 2.2.81 [RFC5545] Section 3.8.4.4 Recurrence ID

V0164:

The specification states that the default value type for **RECURRENCE-ID** is **DATE-TIME**, but it can be set to a **DATE** type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can export **RECURRENCE-ID** as **DATE-TIME** or **DATE**. On import, it can import value types of **DATE-TIME** or **DATE**.

V0165:

The specification states that non-standard, value data type, time zone identifier, and recurrence identifier range property parameters can be specified on the **RECURRENCE-ID** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can only export the *VALUE* parameter on the **RECURRENCE-ID** property. On import, Outlook ignores all parameters on the **RECURRENCE-ID** property.

V0166:

The specification states that the **RECURRENCE-ID** property can be specified in an iCalendar object containing a recurring calendar component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports **RECURRENCE-ID** on VEVENT components that represent exceptions to a recurring appointment/meeting. On import, Outlook treats VEVENT components with a **RECURRENCE-ID** as an exception to a recurring appointment/meeting.

C0016:

The specification states, "If the value of the "DTSTART" property is a DATE type value, then the value MUST be the calendar date for the recurrence instance." It is unclear whether "the value" refers to **DTSTART** or **RECURRENCE-ID**. Furthermore, it is unclear whether "the calendar date for the recurrence instance" refers to the original start date/time of the instance, or the new start date/time of the instance.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports **DSTART** as a **DATE** if and only if the instance is now all-day (whether or not the recurrence is all-day). Outlook exports **RECURRENCE-ID** as a **DATE** if and only if the recurrence is all-day (whether or not the instance is all-day).

On import, if both **DTSTART** and **DTEND** in a VEVENT are of the **DATE** type, Outlook imports the instance as an all-day event. Outlook can import a **RECURRENCE-ID** of type **DATE-TIME** or **DATE**, provided that the value falls on the same day as the original start date of an instance in the recurrence (in the recurrence's time zone).

V0167:

The specification states that when the definition of the recurrence set for a calendar component changes, and hence the **SEQUENCE** property value changes, the **RECURRENCE-ID** for a given recurrence instance might also change.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook issues cancellations to all exceptions in a recurring meeting before changing the **RRULE**. On import, Outlook invalidates all exceptions to a recurring meeting before accepting a change to the **RRULE**.

V0168:

The specification states that the value of the *RANGE* parameter on the **RECURRENCE-ID** property can be set to "THISANDPRIOR" to indicate a range defined by the given instance and all prior instances, or it can be set to "THISANDFUTURE" to indicate a range defined by the given instance an all future instances.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the *RANGE* parameter on the **RECURRENCE-ID** property, and ignores it on import.

## 2.2.82 [RFC5545] Section 3.8.4.5 Related To

V0169:

The specification describes the **RELATED-TO** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not implement the **RELATED-TO** property. Outlook does not import or export the **RELATED-TO** property.

## 2.2.83 [RFC5545] Section 3.8.4.6 Uniform Resource Locator

V0170:

The specification describes the **URL** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not implement the **URL** property. Outlook does not import or export the **URL** property.

## 2.2.84 [RFC5545] Section 3.8.4.7 Unique Identifier

V0171:

The specification states that non-standard property parameters can be specified on the **UID** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports no parameters on the **UID** property. Outlook ignores all parameters on the **UID** property.

V0172:

The specification states that the **UID** property MUST be specified in VEVENT, VTODO, VJOURNAL, and VFREEBUSY components, and that calendaring and scheduling applications MUST generate this property in VEVENT, VTODO, and VJOURNAL components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports exactly one **UID** property on VEVENT components. Outlook does not export VTODO, VJOURNAL, or VFREEBUSY components.

On import, Outlook ignores all instances of **UID** outside of VEVENT components. If multiple **UID** instances are found in a VEVENT, all but the first are ignored. If the **UID** property is missing in a VEVENT, Outlook continues to import it. However, since **UID** is crucial to certain functionality, this can lead to undesirable behavior if the VEVENT represents a meeting or recurring appointment.

V0173:

The specification states that the **UID** MUST be a globally unique identifier, and the generator of the identifier MUST guarantee that the identifier is unique.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook generates unique values for **UID**. On import, Outlook only relies on **UID** values for meetings and recurring appointments within the user's calendar. As long as the value is unique in the scope of all meetings and recurring appointments on the user's calendar, Outlook parses the data correctly.

V0174:

The specification states that it is recommended that the identifier's right-hand side contain some domain identifier.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook **round-trips** the **UID** property if the appointment originated from an iCalendar object. For appointments originating elsewhere, Outlook exports hexadecimal encoding of internal IDs.

On import, Outlook can import any valid **UID**, whether or not this recommendation was followed.

V0175:

The specification states that though other algorithms will work, it is RECOMMENDED that the right-hand side of the **UID** contain some domain identifier such that the generator can guarantee the left-hand side within the scope of that domain.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook round-trips the **UID** property if the appointment originated from an iCalendar object. For appointments originating elsewhere, Outlook does not append any domain identifier to the **UID**.

On import, Outlook can import any valid **UID**, whether or not this recommendation was followed.

V0176:

The specification states that implementations MUST be able to receive and persist values of at least 255 characters for the **UID** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook round-trips the **UID** property of an appointment originated from an iCalendar object, so there is no explicit limit to the size of the **UID** that Outlook can export. For appointments originating in an Outlook .PST or .OST file, the largest **UID** Outlook exports is 140 bytes.

See section 2.1.10 for import behavior.

## 2.2.85 [RFC5545] Section 3.8.5.1 Exception Date-Times

V0177:

The specification states that the default value type of **EXDATE** is **DATE-TIME**, but it can be set to a **DATE** type.

Office Outlook 2007, Outlook 2010

On export, Outlook exports **EXDATE** as a **DATE** type if the recurrence is all-day. Otherwise, Outlook exports it as a **DATE-TIME**.

On import, Outlook can import **EXDATE** as either a **DATE-TIME** or **DATE**, provided the value falls on the same day as the original start date of an instance of the recurrence, in the recurrence's time zone.

V0178:

The specification states that non-standard, value data type, and time zone identifier property parameters can be specified on the **EXDATE** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports the *VALUE* parameter on **EXDATE** if the value data type is **DATE**. Otherwise, Outlook exports the *TZID* parameter.

Outlook can export the *TZID* parameter on the **EXDATE** property. All other parameters are ignored.

V0179:

The specification states that the **EXDATE** property can be specified in an iCalendar object that includes a recurring calendar appointment.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports **EXDATE** in VEVENT components. Outlook ignores **EXDATE** instances outside of VEVENT components on import.

V0180:

The specification states that multiple instances of the **RRULE** and **EXRULE** properties can be specified to define more sophisticated recurrence sets.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

See section 2.2.86 and section 2.2.88 for information regarding this statement.

V0181:

The specification states that the **EXDATE** property can be used to exclude the value specified in **DTSTART**. However, in such cases the original **DTSTART** date MUST still be maintained by the

calendaring and scheduling system because the original **DTSTART** value has inherent usage dependencies by other properties.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can export **EXDATE** properties that correspond to the first instance of a recurrence. On import, Outlook can import **EXDATE** properties that correspond to the first instance of a recurrence. In this scenario, the original **DTSTART** is maintained.

## 2.2.86 [RFC5545] Section 3.8.5.2 Recurrence Date-Times

V0182:

The specification states that the default value type of **RDATE** is **DATE-TIME**, but it can be set to a **DATE** or **PERIOD** type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can export **RDATE** as a **DATE** if both the recurrence and the exception are all-day. Outlook can export **RDATE** as a **DATE-TIME** if both the recurrence and the exception are not all-day. Outlook does not export **RDATE** if the recurrence and exception are not of the same all-day state. Outlook does not export **RDATE** as a **PERIOD**.

On import, Outlook can import an **RDATE** of type **DATE** or **DATE-TIME**. Outlook ignores **RDATE** properties of type **PERIOD**.

Outlook does not support the arbitrary creation of instances in recurrences. Outlook attempts to match **RDATE** values to **EXDATE** values and treat these pairs as moved instances conforming to the rules specified in [MS-OXCICAL] section 2.1.3.1.1.20.18. If an **RDATE** cannot be paired with an **EXDATE**, Outlook's error recovery depends on if the iCalendar object is being imported as a Calendar object or a Calendar folder (section 2.2.2). If the iCalendar object is being imported as a Calendar object, the unmatched **RDATE** is ignored. If the iCalendar object is being imported as a Calendar folder, the unmatched **RDATE** is split off into a separate appointment or meeting.

V0183:

The specification states that non-standard, value data type, and time zone identifier property parameters can be specified on the **RDATE** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports the *VALUE* parameter on **RDATE** if the value data type is **DATE**. Otherwise, Outlook exports the *TZID* parameter.

Outlook can import the *TZID* parameter on the **RDATE** property. All other parameters are ignored.

V0184:

The specification states that the **RDATE** property can be specified within VEVENT, VTODO, VJOURNAL, or VTIMEZONE components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can export **RDATE** in VEVENT components. On import, Outlook ignores any **RDATE** properties outside of VEVENT components.

V0185:

The specification states that multiple instances of the **RRULE** and **EXRULE** properties can be specified to define more sophisticated recurrence sets.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

See section 2.2.86 and section 2.2.88 for information regarding this statement.

## 2.2.87 [RFC5545] Section 3.8.5.3 Recurrence Rule

V0186:

The specification states that non-standard property parameters can be specified on the **RRULE** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export any parameters on the **RRULE** property. On import, Outlook ignores all parameters on the **RRULE** property.

V0187:

The specification states that the **RRULE** property can be specified within recurring VEVENT, VTODO, or VJOURNAL components. It can also be specified once in each STANDARD and DAYLIGHT sub-component of a VTIMEZONE component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can export **RRULE** in VEVENT, STANDARD, and DAYLIGHT components. On import, Outlook ignores any **RRULE** properties outside of VEVENT, STANDARD, and DAYLIGHT components.

C0017:

The specification states, "The duration of a specific recurrence may be modified in an exception component or simply by using an 'RDATE' property of PERIOD value type."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export **PERIOD** values in the **RDATE** property. Instead, Outlook represents changes in the duration of an exception using a separate VEVENT component with the **RECURRENCE-ID** property.

See section 2.1.10 for import behavior.

V0188:

The specification uses ABNF notation to describe the format of the **RRULE** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook conforms to the ABNF, as specified in [RFC5545] Section 3.8.5.4.

On import, Outlook only supports a subset of **RECUR** values. This subset is specified in [MS-OXCICAL] section 2.1.3.2 (and all sub-sections). If the iCalendar object is being imported as a Calendar folder and the **RECUR** value can be split into a finite number of supported **RECUR** values, the VEVENT is split into multiple recurring appointments and meetings. If the **RECUR** value cannot be split into a finite number of supported **RECUR** values, the entire VEVENT is ignored.

## 2.2.88 [RFC5545] Section 3.8.6.1 Action

V0189:

The specification states that non-standard property parameters can be specified on the **ACTION** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export any parameters on the **ACTION** property. All instances of the **ACTION** property are ignored on import.

V0190:

The specification states that the **ACTION** property MUST be specified once in a VALARM component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook ignores the **ACTION** property on import.

## 2.2.89 [RFC5545] Section 3.8.6.2 Repeat Count

V0191:

The specification describes the **REPEAT** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not implement the **REPEAT** property. Outlook does not import or export the **REPEAT** property.

C0018:

The specification states, "If the alarm triggers more than once, then this property MUST be specified along with the "DURATION" property."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

The MUST in this statement is interpreted as being contingent on the alarm triggering more than once. Outlook does not export VALARM components that trigger more than once.

## 2.2.90 [RFC5545] Section 3.8.6.3 Trigger

V0192:

The specification states that the default value type of the **TRIGGER** property is **DURATION**, but that it can be set to **DATE-TIME**.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports the **TRIGGER** property as a **DURATION**. On import, Outlook ignores the **TRIGGER** property unless it is of type **DURATION**.

V0193:

The specification states that non-standard, value data type, time zone identifier, and trigger relationship property parameters can be specified on the **TRIGGER** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports no parameters on the **TRIGGER** property. Outlook ignores all parameters on the **TRIGGER** property on import.

V0194:

The specification states that the **TRIGGER** property MUST be specified in VALARM components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook ignores any VALARM components that do not have a valid TRIGGER property of type **DURATION**. If multiple **TRIGGER** properties are found, only the first instance of type **DURATION** is used.

V0195:

The specification states that the duration can be explicitly set to trigger from either the end or the start of the associated event or to-do with the *RELATED* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the *RELATED* parameter on the **TRIGGER** property. On import, Outlook ignores the *RELATED* parameter on the **TRIGGER** property and treats all reminders as relative to the start of each instance of the event.

V0196:

The specification states that either a positive or negative duration may be specified for the **TRIGGER** property. An alarm with a positive duration is triggered after the associated start or end of the event or to-do. An alarm with a negative duration is triggered before the associated start or end of the event or to-do.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports the **TRIGGER** property with a negative or zero duration. On import, positive values are treated as negative values.

V0197:

The specification states that if a value type of **DATE-TIME** is specified, then the property value MUST be specified in UTC time format.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the **TRIGGER** property as a **DATE-TIME**. On import, Outlook ignores **TRIGGER** properties of type **DATE-TIME**.

V0198:

The specification uses ABNF to specify the format of the **TRIGGER** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook ignores **TRIGGER** properties of type **DATE-TIME**.

## 2.2.91 [RFC5545] Section 3.8.7.1 Date-Time Created

V0199:

The specification states that non-standard property-parameters can be specified on the **CREATED** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export any parameters on the **CREATED** property. On import, Outlook ignores the **CREATED** property.

V0200:

The specification states that the **CREATED** property can be specified once in VEVENT, VTODO, or VJOURNAL components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports at most one **CREATED** property in each VEVENT component. Outlook ignores all **CREATED** properties.

## 2.2.92 [RFC5545] Section 3.8.7.2 Date-Time Stamp

V0201:

The specification states that non-standard property parameters can be specified on the **DTSTAMP** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export any parameters on the **DTSTAMP** property. On import, Outlook ignores all parameters except *TZID* on the **DTSTAMP** property.

V0202:

The specification states that the **DTSTAMP** property MUST be specified within the VEVENT, VTODO, VJOURNAL, and VFREEBUSY components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports exactly one **DTSTAMP** property in each VEVENT component. Outlook does not export VTODO, VJOURNAL, or VFREEBUSY components.

On import, if the **DTSTAMP** property is not present on a VEVENT component, Outlook uses the time of import. If multiple **DTSTAMP** properties are found, Outlook ignores all but the first. Outlook ignores all **DTSTAMP** properties outside of a VEVENT component.

V0203:

The specification states that the **DTSTAMP** property value MUST be specified in UTC time format.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook can import **DTSTAMP** property values specified in UTC, local, or floating time format.

## 2.2.93 [RFC5545] Section 3.8.7.3 Last Modified

V0204:

The specification states that non-standard property parameters can be specified on the **LAST-MODIFIED** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export any parameters on the **LAST-MODIFIED** property. On import, Outlook ignores all instances of the **LAST-MODIFIED** property.

V0205:

The specification states that the **LAST-MODIFIED** property can be specified within the VEVENT, VTODO, VJOURNAL, or VTIMEZONE components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports at most one **LAST-MODIFIED** property on VEVENT components. Outlook does not export VTODO, VJOURNAL, or VTIMEZONE components.

On import, Outlook ignores all instances of the **LAST-MODIFIED** property.

## 2.2.94 [RFC5545] Section 3.8.7.4 Sequence Number

V0206:

The specification states that non-standard property parameters can be specified on the **SEQUENCE** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export any parameters on the **SEQUENCE** property. On import, Outlook ignores all parameters on the **SEQUENCE** property.

V0207:

The specification states that the **SEQUENCE** property can be specified within the VEVENT, VTODO, or VJOURNAL components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports at most one **SEQUENCE** property on VEVENT components. Outlook does not export VTODO or VJOURNAL components.

On import, Outlook ignores all instances of the **SEQUENCE** property outside of VEVENT components.

C0019:

The specification states that the sequence number is monotonically incremented each time the organizer makes a significant revision to the calendar component. This passage seems to indicate an intentional point of variability as to what kind of change is considered "significant."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook increments the sequence number any time the organizer sends out an update to the meeting, whether or not any properties were changed.

On import, Outlook uses the **SEQUENCE** property to correctly handle out-of-order receipt of meeting update. Non-compliant sequence numbers result in incorrect handling of meeting updates.

## 2.2.95 [RFC5545] Section 3.8.8.2 Non-standard Properties

V0208:

The specification states that non-standard and language property parameters can be specified on non-standard properties.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can import and export standard and non-standard property parameters on non-standard properties. For a list of the supported non-standard properties, see [MS-OXCICAL] section 2.1.3.1 (and all subsections).

V0209:

The specification states that non-standard properties can be specified within any calendar component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can export and import non-standard properties on the VEVENT and VCALENDAR components. For a list of the supported non-standard properties, see [MS-OXCICAL] section 2.1.3.1 (and all

subsections). Outlook ignores all non-standard properties outside of VEVENT or VCALENDAR components.

V0210:

The specification states that it is recommended that vendors concatenate onto the "X-" prefix for non-standard properties another short prefix text to identify the vendor.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports several non-standard properties. Not all of them follow this recommendation. On import, Outlook ignores all unrecognized properties, whether or not they follow this recommendation. Outlook imports some non-standard properties that do not follow this recommendation. For a list of the supported non-standard properties, see [MS-OXCICAL] section 2.1.3.1 (and all subsections).

V0211:

The specification states that the data type for non-standard properties is **TEXT**. Optionally, the data type can be any other valid data type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports some non-standard property types that have a data type other than **TEXT**. For a list of the supported non-standard properties, see [MS-OXCICAL] section 2.1.3.1 (and all subsections).

## 2.2.96 [RFC5545] Section 3.8.8.3 Request Status

V0212:

The specification describes the **REQUEST-STATUS** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not implement the **REQUEST-STATUS** property. Outlook does not import or export the **REQUEST-STATUS** property.

## 2.2.97 [RFC5545] Section 5 Recommended Practices

V0213:

The specification states that content lines longer than 75 octets SHOULD be folded.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook can parse content lines regardless of their folded width.

V0214:

The specification states when the combination of the **RRULE** and **RDATE** properties on an iCalendar object produces multiple instances having the same start date/time, they should be collapsed to and considered as one instance.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook can export an **RDATE** property that has the same start date/time as an instance of the recurrence.

On import, Outlook does not follow this recommendation. Outlook's handling of the **RDATE** property is documented in section 2.2.87 and [MS-OXCICAL] section 2.1.3.1.1.20.18.

V0215:

The specification states when a calendar user receives multiple requests for the same calendar component as a result of being on multiple mailing lists specified by **ATTENDEE** properties in the request, they SHOULD respond to only one of the requests. The calendar user SHOULD also specify (using the *MEMBER* parameter of the **ATTENDEE** property) which mailing list they are a member of.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not prevent the user from responding to duplicate meeting requests. However, Outlook does display a message to the user indicating that he has already responded to the request.

Outlook does not export the *MEMBER* parameter, and ignores it on import.

V0216:

The specification states that an implementation can truncate a **SUMMARY** property value to 255 characters.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can export **SUMMARY** properties longer than 255 characters, but does not do so for appointments or meetings that were created with Outlook.

On import, Outlook truncates the **SUMMARY** property to 255 characters.

V0217:

The specification states if seconds of the minute are not supported by an implementation, then a value of "00" SHOULD be specified for the seconds component in a time value.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can export non-zero seconds in **DATE-TIME** properties.

On import, Outlook rounds times to the nearest minute for the following properties:

**DTSTART**

**DTEND**

**RDATE**

**EXDATE**

**RECURRENCE-ID**

All properties specified in local time

All properties specified in floating time

V0218:

The specification states that **TZURL** values SHOULD NOT be specified as a FILE URI type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the **TZURL** property. On import, all instances of the **TZURL** property are ignored.

V0219:

The specification lists possible English values for the **CATEGORIES** property and states that categories can be specified in any registered language.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook allows the user to define categories with arbitrary names. Outlook can import any value for the **CATEGORIES** property. However, some processing is performed on the strings during import ([MS-OXCICAL] section 2.1.3.1.1.20.3).

V0220:

The specification lists possible English values for the **RESOURCES** property and states that categories can be specified in any registered language.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook allows the user to define resources with arbitrary names. Outlook can import any value for the **RESOURCES** property. However, some processing is performed on the strings during import ([MS-OXCICAL] section 2.1.3.1.1.20.21).

## 2.2.98 [RFC5545] Section 8.1 iCalendar Media Type Registration

E0001:

The specification states, "The Calendaring and Scheduling Core Object Specification is intended for use as a **MIME content-type**."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

In addition to handling the MIME content-type, Outlook also registers the .ics and .vcs file extensions. It also registers the webcal:// and webcals:// protocols.

When a .ics or .vcs file is opened, Outlook interprets it as a Calendar folder or a Calendar object, based on the following rules:

1. If no VEVENT component is found within the first 32 kilobytes of the file, then the file is treated as a Calendar folder.

2. If an **X-MS-OLK-FORCEINSPECTOROPEN** property ([MS-OXCICAL] section 2.1.3.1.1.9) is found within the first 32 kilobytes of the file and is set to "TRUE", then the file is treated as a Calendar object.

3. If there is no **X-WR-CALNAME** property ([MS-OXCICAL] section 2.1.3.1.1.17) and only one VEVENT component in the first 32 kilobytes of the file, then the file is treated as a Calendar object.

4. If the **METHOD** property is set to "REQUEST", "REPLY", or "CANCEL" in the first 32 kilobytes of the file, then the file is treated as a Calendar object.

5. If none of the conditions above are met, then the file is treated as a Calendar folder.

If a file is interpreted as a Calendar folder, the information in the file is imported into a new folder in the Outlook user's message store. If the file is interpreted as a Calendar object, it is presented to the user as a new item, which the user can then choose to save to their default Calendar folder.

When a webcal:// or webcals:// **URL** is opened, Outlook treats the file as a Calendar folder. A new folder is created for the first import of a particular URL, but subsequent imports of the same URL replace the contents of the folder created on the first import.

V0221:

The specification states that the *charset*, *method*, component, and *optinfo* parameters are optional.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

| Parameter | Behavior |
|---|---|
| *charset* | This parameter is ignored on import. It is set to "utf-8" on export. |
| *method* | For both import and export, only the following values are supported: "REQUEST", "REPLY", "CANCEL", and "COUNTER" (case-insensitive). On import, if a "text/calendar" MIME part has a *method* parameter with any other value, or if the *method* parameter is not present, the MIME part is not imported as an iCalendar entity. |
| *component* | This parameter is ignored on import. It is not set on export. |
| *optinfo* | This parameter is ignored on import. It is not set on export. |

V0222:

The specification states, "This [MIME content-type] can contain 8bit characters, so the use of quoted-printable or base64 MIME Content-Transfer-Encodings might be necessary when iCalendar objects are transferred across protocols restricted to the 7bit repertoire. Note that a text valued property in the content entity can also have content encoding of special characters using a BACKSLASH character escapement technique. This means that content values can end up encoded twice."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can import "text/calendar" MIME parts that are encoded with base64 encoding. On export, Outlook does not use base64 encoding for "text/calendar" MIME parts.

V0223:

The specification states that the file extension ".ifb" is to be used to designate a file containing free or busy time information.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export or import files with the ".ifb" file extension.

V0224:

The specification states that the Macintosh file type codes "iCal" and "iFBf" are to be used in Apple Macintosh operating system environments.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not install or operate in Apple Macintosh operating system environments. Consequently, it does not import or export files with the "iCal" or "iFBf" file type codes.

## 2.2.99 [RFC5546] Section 2 Interoperability Models

V0225:

The specification states that an application written to this specification may work with bindings for the store-and-forward transport, the real time transport, or both. Also note that iTIP could be bound to other transports.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can export certain types of iTIP data within a text/calendar MIME part of an email or as an .ics file. The following table specifies what type of data can be exported in each format.

| iTIP Method | MIME Part | .ics File |
|---|---|---|
| PUBLISH | Cannot export | Can export |
| REQUEST | Can export | Can export |
| REPLY | Can export | Cannot export |
| ADD | Cannot export | Cannot export |
| CANCEL | Can export | Cannot export |
| REFRESH | Cannot export | Cannot export |
| COUNTER | Can export | Cannot export |
| DECLINE-COUNTER | Cannot export | Cannot export |

Outlook can import certain types of iTIP data from a text/calendar MIME part of an email or from an .ics file. The following table specifies what type of data can be imported from each format.

| iTIP Method | MIME Part | .ics File |
|---|---|---|
| PUBLISH | Cannot import (rendered as raw content lines in message body) | Can import |
| REQUEST | Can import | Can import |
| REPLY | Can import | Can import |
| ADD | Cannot import (rendered as raw content lines in message body) | Treated as PUBLISH |
| CANCEL | Can import | Can import |
| REFRESH | Cannot import (rendered as raw content lines in message body) | Treated as PUBLISH |
| COUNTER | Can import | Treated as PUBLISH |
| DECLINE-COUNTER | Cannot import (rendered as raw content lines in message body) | Treated as PUBLISH |

## 2.2.100    [RFC5546] Section 2.1 Application Protocol

V0226:

The specification states that attendees do not make direct changes to the master calendar entry. They can, however, use the COUNTER method to suggest changes to the organizer.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not allow attendees to make direct changes to the master calendar entry. Outlook does allow attendees to propose new times to the organizer.

## 2.2.101    [RFC5546] Section 2.1.3 Acting on Behalf of Other Calendar Users

V0227:

The specification states that a role of CHAIR may be ascribed to one or more attendees. The "chair" and the organizer may or may not be the same calendar user.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not support the role of CHAIR, and does not export an **ATTENDEE** property with a ROLE of CHAIR. On import, Outlook treats **ATTENDEE** properties with a ROLE of CHAIR as if ROLE were REQ-PARTICIPANT.

V0228:

The specification states that a sent-by parameter may be specified in either the organizer or **attendee** properties. When specified, the sent-by parameter indicates that the responding calendar user acted on behalf of the specified attendee or organizer.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the *SENT-BY* parameter. Instead, Outlook uses the **X-MS-OLK-SENDER** property ([MS-OXCICAL] section 2.1.3.1.1.20.61) to indicate that another calendar user acted on behalf of the attendee or organizer.

On import, Outlook ignores all instances of the *SENT-BY* parameter.

## 2.2.102 [RFC5546] Section 2.1.4 Component Revisions

C0020:

The specification describes when the **SEQUENCE** property MUST and MUST NOT be incremented.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook's handling of the **SEQUENCE** property is specified in section 2.2.95.

V0229:

The specification states that in some circumstances the organizer may not have received responses to the final revision sent out. In this situation, the organizer may wish to send an update REQUEST and set *RSVP*=TRUE for all attendees, so that current responses can be collected.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook permits the organizer to resend a meeting request to all attendees even if no significant changes have been made. Outlook allows attendees to respond to the latest update of a meeting request even if no significant changes have been made.

V0230:

The specification states that the value of the **SEQUENCE** property contained in a response from an attendee may not always match the organizer's revision. Implementations may choose to have the calendar user agent indicate to the user that the response is to an entry that has been revised and allow the user to decide whether or not to accept the response.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook automatically updates an attendee's copy of a meeting when a meeting update is received. The user is allowed to open and decline the meeting at any time.

## 2.2.103 [RFC5546] Section 2.1.5 Message Sequencing

V0231:

The specification states that the primary key for referencing a particular iCalendar component is the **UID** property value. To reference an instance of a recurring component, the primary key is composed of the **UID** and the **RECURRENCE-ID** properties.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can output iTIP data with just a **UID** property, and it can also output iTIP data with both a **UID** and **RECURRENCE-ID**.

On import, Outlook uses the **UID** and **RECURRENCE-ID** properties to property correlate a meeting request/response/cancellation/counter-proposal with a Calendar object.

C0021:

The specification uses the term **UID** in rules 2 – 4 in [RFC5546], but does not mention the **RECURRENCE-ID**.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

It is assumed that the use of **UID** in rules 2 – 4 is referring to the combination of the **UID** and **RECURRENCE-ID** property as described in rule 1.

V0232:

The specification states that the secondary key for referencing a component is the **SEQUENCE** property value. For components where the **UID** is the same, the component with the highest numerical value for the **SEQUENCE** property obsoletes all other revisions of the component with lower values.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can export multiple versions of a meeting request and multiple responses to a meeting request. On import, Outlook uses the **SEQUENCE** property to determine which revision is the latest.

V0233:

The specification states that attendees send REPLY messages to the organizer. For replies where the **UID** property value is the same, the value of the **SEQUENCE** property indicates the revision of the component to which the attendee is replying. The reply with the highest numerical value for the **SEQUENCE** property obsoletes all other replies with lower values.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

When generating a REPLY iCalendar object, Outlook uses the same **SEQUENCE** number as the REQUEST iCalendar that the user is responding to. On import, Outlook uses the **SEQUENCE** property to determine which revision is the latest.

V0234:

The specification states that in situations where the **UID** and **SEQUENCE** properties match, the **DTSTAMP** property is used as the tie-breaker. The component with the latest **DTSTAMP** overrides all others.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook always exports a **DTSTAMP** property that can be used to break ties in the **SEQUENCE** number. On import, Outlook uses the **DTSTAMP** property to break ties in the **SEQUENCE** number.

V0235:

The specification states that for each **ATTENDEE** property of a component, calendar user agents must persist the **SEQUENCE** and **DTSTAMP** property values associated with the attendee's response.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook persists the **DTSTAMP** property associated with the attendee's response. However, the **SEQUENCE** number is only indirectly persisted. All responses that do not match the **SEQUENCE** number of the meeting are ignored, and all responses are invalidated when the **SEQUENCE** number is incremented on the meeting.

## 2.2.104    [RFC5546] Section 3 Application Protocol Elements

V0236:

The specification specifies various combinations of calendar components and the method types that are supported.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VTODO, VJOURNAL, or VFREEBUSY components, and ignores them on import. Outlook's support for each method is specified in section 2.2.100.

## 2.2.105    [RFC5546] Section 3.1.1 VCALENDAR

V0237:

The specification specifies the allowed number of instances of components and properties in the following table.

| Component/property | Presence | Comment |
|---|---|---|
| **CALSCALE** | 0 or 1 | |
| **PRODID** | 1 | |
| **VERSION** | 1 | Value MUST be 2.0. |
| **IANA-PROPERTY** | 0+ | |
| **X-PROPERTY** | 0+ | |

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

The following table specifies the number of instances Outlook exports for these components and properties:

| Component/property | Number of instances exported | Notes |
|---|---|---|
| **CALSCALE** | 0 | |
| **PRODID** | 1 | |
| **VERSION** | 1 | Value is "2.0" |
| **IANA-PROPERTY** | 0 | |
| **X-PROPERTY** | 0-19 | |

The following table specifies the number of instances Outlook imports for these components and properties. If more instances are found, they are ignored.

| Component/property | Number of instances imported | Notes |
|---|---|---|
| **CALSCALE** | 0 | |

| Component/property | Number of instances imported | Notes |
|---|---|---|
| **PRODID** | 0-1 | |
| **VERSION** | 0-1 | "1.0" results in vCalendar import. |
| **IANA-PROPERTY** | 0 | |
| **X-PROPERTY** | 0+ | |

## 2.2.106 [RFC5546] Section 3.1.2 VTIMEZONE

V0238:

The specification specifies the allowed number of instances of components and properties in a *VTIMEZONE* component in the following table.

| Component/property | Presence | Comment |
|---|---|---|
| **VTIMEZONE** | 0+ | MUST be present if any date/time refers to timezone. |
| **•DAYLIGHT** | 0+ | MUST be one or more of either STANDARD or DAYLIGHT. |
| **••COMMENT** | 0+ | |
| **••DTSTART** | 1 | MUST be local time format |
| **••RDATE** | 0+ | if present **RRULE** MUST NOT be present |
| **••RRULE** | 0 or 1 | if present **RDATE** MUST NOT be present |
| **••TZNAME** | 0+ | |
| **••TZOFFSETFROM** | 1 | |
| **••TZOFFSETTO** | 1 | |
| **••IANA-PROPERTY** | 0+ | |
| **••X-PROPERTY** | 0+ | |
| **•LAST-MODIFIED** | 0 or 1 | |
| **•STANDARD** | 0+ | MUST be one or more of either STANDARD or DAYLIGHT |
| **••COMMENT** | 0+ | |
| **••DTSTART** | 1 | MUST be local time format |
| **••RDATE** | 0+ | If present, **RRULE** MUST NOT be present |
| **••RRULE** | 0 or 1 | If present, **RDATE** MUST NOT be present |
| **••TZNAME** | 0+ | |
| **••TZOFFSETFROM** | 1 | |
| **••TZOFFSETTO** | 1 | |
| **••IANA-PROPERTY** | 0+ | |

| Component/property | Presence | Comment |
|---|---|---|
| ••X-PROPERTY | 0+ | |
| •TZID | 1 | |
| •TZURL | 0 or 1 | |
| •IANA-PROPERTY | 0+ | |
| •X-PROPERTY | 0+ | |

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

The following table specifies the number of instances Outlook exports for these components and properties in a *VTIMEZONE* component:

| Component/property | Number of instances exported | Notes |
|---|---|---|
| VTIMEZONE | 0+ | Is present if a **TZID** refers to this timezone |
| •DAYLIGHT | 0-1 | |
| ••COMMENT | 0 | |
| ••DTSTART | 1 | Value is in local time |
| ••RDATE | 0 | |
| ••RRULE | 1 | |
| ••TZNAME | 0 | |
| ••TZOFFSETFROM | 1 | |
| ••TZOFFSETTO | 1 | |
| ••IANA-PROPERTY | 0 | |
| ••X-PROPERTY | 0 | |
| •LAST-MODIFIED | 0 | |
| •STANDARD | 1 | |
| ••COMMENT | 0 | |
| ••DTSTART | 1 | Value is in local time |
| ••RDATE | 0 | |
| ••RRULE | 0-1 | |
| ••TZNAME | 0 | |
| ••TZOFFSETFROM | 1 | |
| ••TZOFFSETTO | 1 | |
| ••IANA-PROPERTY | 0 | |
| ••X-PROPERTY | 0 | |
| •TZID | 1 | |

| Component/property | Number of instances exported | Notes |
|---|---|---|
| •TZURL | 0 | |
| •IANA-PROPERTY | 0 | |
| •X-PROPERTY | 0 | |

The following table specifies the number of instances Outlook imports for these components and properties in a *VTIMEZONE* component. If more instances are found, they are ignored. If fewer instances are found, the outer component is considered invalid and ignored.

| Component/property | Number of instances imported | Notes |
|---|---|---|
| VTIMEZONE | 0+ | If not present for a TZID, a default time zone is used. |
| •DAYLIGHT | 0-1 | VTIMEZONE components that contain no STANDARD or DAYLIGHT components are ignored. |
| ••COMMENT | 0 | |
| ••DTSTART | 0-1 | Values in UTC are treated as local time. |
| ••RDATE | 0 | |
| ••RRULE | 0-1 | |
| ••TZNAME | 0-1 | |
| ••TZOFFSETFROM | 1 | |
| ••TZOFFSETTO | 1 | |
| ••IANA-PROPERTY | 0 | |
| ••X-PROPERTY | 0 | |
| •LAST-MODIFIED | 0 | |
| •STANDARD | 0-1 | VTIMEZONE components that contain no STANDARD or DAYLIGHT components are ignored. |
| ••COMMENT | 0 | |
| ••DTSTART | 1 | Values in UTC are treated as local time. |
| ••RDATE | 0 | |
| ••RRULE | 0-1 | |
| ••TZNAME | 0-1 | If multiple **TZNAME** properties are present, only the first is imported. |
| ••TZOFFSETFROM | 1 | |
| ••TZOFFSETTO | 1 | |
| ••IANA-PROPERTY | 0 | |
| ••X-PROPERTY | 0 | |

## 2.2.107    [RFC5546] Section 3.1.3 VALARM

V0239:

The specification specifies the allowed number of instances of components and properties in a *VALARM* component in the following table.

| Component/property | Presence | |
|---|---|---|
| **VALARM** | 0+ | |
| •**ACTION** | 1 | |
| •**ATTACH** | 0+ | |
| •**ATTENDEE** | 0+ | |
| •**DESCRIPTION** | 0 or 1 | |
| •**DURATION** | 0 or 1 | If present, **REPEAT** MUST be present |
| •**REPEAT** | 0 or 1 | If present, **DURATION** MUST be present |
| •**SUMMARY** | 0 or 1 | |
| •**TRIGGER** | 1 | |
| •**IANA-PROPERTY** | 0+ | |
| •**X-PROPERTY** | 0+ | |

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

The following table specifies the number of instances Outlook exports for these components and properties in a *VALARM* component:

| Component/property | Number of instances exported | Notes |
|---|---|---|
| **VALARM** | 0-1 | |
| ●**ACTION** | 1 | |
| ●**ATTACH** | 0 | |
| •**ATTENDEE** | 0 | |
| ●**DESCRIPTION** | 1 | |
| ●**DURATION** | 0 | |
| ●**REPEAT** | 0 | |
| ●**SUMMARY** | 0 | |
| ●**TRIGGER** | 1 | |
| •**IANA-PROPERTY** | 0 | |
| •**X-PROPERTY** | 0 | |

The following table specifies the number of instances Outlook imports for these components and properties in a *VALARM* component. If more instances are found, they are ignored. If fewer instances are found, the outer component is considered invalid and ignored.

| Component/property | Number of instances exported | Notes |
|---|---|---|
| **VALARM** | 0-1 | |
| **•ACTION** | 0 | |
| **•ATTENDEE** | 0 | |
| **•ATTACH** | 0 | |
| **•DESCRIPTION** | 0 | |
| **•DURATION** | 0 | |
| **•REPEAT** | 0 | |
| **•SUMMARY** | 0 | |
| **•TRIGGER** | 1 | |
| **•IANA-PROPERTY** | 0 | |
| **•X-PROPERTY** | 0 | |

## 2.2.108 [RFC5546] Section 3.2 Methods for VEVENT Calendar Components

V0240:

The specification lists the methods that are defined for VEVENT components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook's support for the listed methods are specified in section 2.2.100.

## 2.2.109 [RFC5546] Section 3.2.1 PUBLISH

V0241:

The specification states that the organizer MUST be present in a PUBLISH-type iCalendar component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook treats any VEVENT with an **ORGANIZER** or **ATTENDEE** property in a PUBLISH-type component as a meeting. VEVENT components without an **ORGANIZER** or **ATTENDEE** are treated as appointments.

See section 2.1.11 for export behavior.

V0242:

The specification states that the attendees MUST NOT be present in a PUBLISH-type iCalendar component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook treats any VEVENT with an **ORGANIZER** or **ATTENDEE** property in a PUBLISH-type component as a meeting. VEVENT components without an **ORGANIZER** or **ATTENDEE** are treated as appointments.

See section 2.1.12 for export behavior.

C0022:

The specification lists a *VALARM* component in the table of allowed components and properties in a PUBLISH-type iCalendar object. The indentation of the VALARM component is the same as the VEVENT component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

It is assumed that the author intended to indent the VALARM component to visually indicate that it is a sub-component of the VEVENT.

V0243:

The specification specifies the allowed number of instances of components and properties in a PUBLISH-type iCalendar object in the following table.

| Component/Property | Presence | |
|---|---|---|
| **METHOD** | 1 | Must equal "PUBLISH". |
| **VEVENT** | 1+ | |
| •**DTSTAMP** | 1 | |
| •**DTSTART** | 1 | |
| •**ORGANIZER** | 1 | |
| •**SUMMARY** | 1 | Can be null. |
| •**UID** | 1 | |
| •**RECURRENCE-ID** | 0 or 1 | Only if referring to an instance of a recurring calendar component. Otherwise, it MUST NOT be present. |
| •**SEQUENCE** | 0 or 1 | MUST be present if value is greater than 0, MAY be present if 0. |
| •**ATTACH** | 0+ | |
| •**CATEGORIES** | 0+ | |
| •**CLASS** | 0 or 1 | |
| •**COMMENT** | 0+ | |
| •**CONTACT** | 0 or 1 | |
| •**CREATED** | 0 or 1 | |
| •**DESCRIPTION** | 0 or 1 | Can be null. |
| •**DTEND** | 0 or 1 | If present, **DURATION** MUST NOT be present. |
| •**DURATION** | 0 or 1 | If present, **DTEND** MUST NOT be present. |
| •**EXDATE** | 0+ | |
| •**GEO** | 0 or 1 | |
| •**LAST-MODIFIED** | 0 or 1 | |
| •**LOCATION** | 0 or 1 | |

| Component/Property | Presence | |
|---|---|---|
| •**PRIORITY** | 0 or 1 | |
| •**RDATE** | 0+ | |
| •**RELATED-TO** | 0+ | |
| •**RESOURCES** | 0+ | |
| •**RRULE** | 0 or 1 | |
| •**STATUS** | 0 or 1 | MAY be one of TENTATIVE/CONFIRMED/CANCELLED |
| •**TRANSP** | 0 or 1 | |
| •**URL** | 0 or 1 | |
| •**IANA-PROPERTY** | 0+ | |
| •**X-PROPERTY** | 0+ | |
| •**ATTENDEE** | 0 | |
| •**REQUEST-STATUS** | 0 | |
| •**VALARM** | 0+ | |
| **VFREEBUSY** | 0 | |
| **VJOURNAL** | 0 | |
| **VTODO** | 0 | |
| **VTIMEZONE** | 0+ | MUST be present if any date/time refers to a timezone. |
| **IANA-COMPONENT** | 0+ | |
| **X-COMPONENT** | 0+ | |

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

The following table specifies the number of instances Outlook exports for these components and properties in a PUBLISH-type iCalendar object:

| Component/property | Number of instances exported | Notes |
|---|---|---|
| **METHOD** | 1 | Is set to "PUBLISH". |
| **VEVENT** | 0+ | See section 2.1.13 |
| •**DTSTAMP** | 1 | |
| •**DTSTART** | 1 | |
| •**ORGANIZER** | 0-1 | See section 2.1.11 |
| •**SUMMARY** | 0-1 | See section 2.1.14 |
| •**UID** | 1 | |
| •**RECURRENCE-ID** | 0-1 | Exported when referring to an instance of a recurring appointment or meeting. |

| Component/property | Number of instances exported | Notes |
|---|---|---|
| ●**SEQUENCE** | 0-1 | Can be set to 0. |
| ●**ATTACH** | 0+ | |
| ●**CATEGORIES** | 0-1 | Can be a list. |
| ●**CLASS** | 0-1 | |
| ●**COMMENT** | 0 | |
| ●**CONTACT** | 0+ | |
| ●**CREATED** | 0-1 | |
| ●**DESCRIPTION** | 0-1 | Can be an empty string. |
| ●**DTEND** | 1 | |
| ●**DURATION** | 0 | |
| ●**EXDATE** | 0-1 | |
| ●**EXRULE** | 0 | |
| ●**GEO** | 0 | |
| ●**LAST-MODIFIED** | 0-1 | |
| ●**LOCATION** | 0-1 | |
| ●**PRIORITY** | 0-1 | |
| ●**RDATE** | 0-2 | |
| ●**RELATED-TO** | 0 | |
| ●**RESOURCES** | 0-1 | Can be a list. |
| ●**RRULE** | 0-1 | |
| ●**STATUS** | 0 | |
| ●**TRANSP** | 0-1 | |
| ●**URL** | 0 | |
| •**IANA-PROPERTY** | 0 | |
| •**X-PROPERTY** | 0-34 | |
| ●**ATTENDEE** | 0+ | See section 2.1.12 |
| ●**REQUEST-STATUS** | 0 | |
| •**VALARM** | 0-1 | |
| **VFREEBUSY** | 0 | |
| **VJOURNAL** | 0 | |
| **VTODO** | 0 | |

| Component/property | Number of instances exported | Notes |
|---|---|---|
| **VTIMEZONE** | 0+ | A VTIMEZONE is exported for each unique *TZID* parameter in the iCalendar object. |
| **IANA-COMPONENT** | 0 | |
| **X-COMPONENT** | 0 | |

The following table specifies the number of instances Outlook imports for these components and properties in a PUBLISH-type iCalendar object. If more instances are found, they are ignored. If fewer instances are found, the outer component is considered invalid and ignored.

| Component/Property | Number of instances imported | Notes |
|---|---|---|
| **METHOD** | 0-1 | A missing **METHOD** value is treated as "PUBLISH". |
| **VEVENT** | 0+ | |
| **●DTSTAMP** | 0-1 | |
| **●DTSTART** | 0-1 | |
| **●ORGANIZER** | 0-1 | |
| **●SUMMARY** | 0-1 | |
| **●UID** | 0-1 | |
| **●RECURRENCE-ID** | 0-1 | Is assumed to refer to an instance of a recurring calendar component. |
| **●SEQUENCE** | 0-1 | Can import 0. |
| **●ATTACH** | 0+ | |
| **●CATEGORIES** | 0+ | Can import a list. |
| **●CLASS** | 0-1 | |
| **●COMMENT** | 0 | |
| **●CONTACT** | 0+ | |
| **●CREATED** | 0 | |
| **●DESCRIPTION** | 0-1 | Can import an empty string. |
| **●DTEND** | 0-1 | If both **DTEND** and **DURATION** are present, **DTEND** is used. |
| **●DURATION** | 0-1 | If both **DTEND** and **DURATION** are present, **DTEND** is used. |
| **●EXDATE** | 0+ | |
| **●EXRULE** | 0 | |
| **●GEO** | 0 | |
| **●LAST-MODIFIED** | 0 | |

| Component/Property | Number of instances imported | Notes |
|---|---|---|
| ●LOCATION | 0-1 | |
| ●PRIORITY | 0-1 | |
| ●RDATE | 0+ | |
| ●RELATED-TO | 0 | |
| ●RESOURCES | 0+ | Can import a list. |
| ●RRULE | 0+ | |
| ●STATUS | 0-1 | Can import "TENTATIVE", "CONFIRMED", or "CANCELED". |
| ●TRANSP | 0-1 | |
| ●URL | 0 | |
| •IANA-PROPERTY | 0 | |
| •X-PROPERTY | 0+ | |
| ●ATTENDEE | 0+ | |
| ●REQUEST-STATUS | 0 | |
| •VALARM | 0-1 | |
| VFREEBUSY | 0 | |
| VJOURNAL | 0 | |
| VTODO | 0 | |
| VTIMEZONE | 0+ | If a TZID references an undeclared VTIMEZONE, a default time zone is used. |
| IANA-COMPONENT | 0 | |
| X-COMPONENT | 0 | |

## 2.2.110 [RFC5546] Section 3.2.2 REQUEST

V0244:

The specification states that for the REQUEST method, multiple VEVENT components in a single iCalendar object are only permitted for components with the same **UID** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook imports REQUEST-type iCalendar objects with multiple VEVENT components provided the following conditions are met:

All VEVENT components have the same UID value.

The **X-MS-OLK-FORCEINSPECTOROPEN** property on the VCALENDAR component is set to "TRUE".

Exactly one VEVENT component has an **RRULE** property and no **RECURRENCE-ID** property.

All other VEVENT components have a **RECURRENCE-ID** property.

C0023:

The specification lists a VALARM component in the table of allowed components and properties in a REQUEST-type iCalendar object. The indentation of the VALARM component is the same as the VEVENT component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

It is assumed that the author intended to indent the VALARM component to visually indicate that it is a sub-component of the VEVENT.

V0245:

The specification specifies the allowed number of instances of components and properties in a REQUEST-type iCalendar object in the following table.

| Component/property | Presence | |
|---|---|---|
| **METHOD** | 1 | MUST equal "REQUEST". |
| **VEVENT** | 1+ | All components MUST have the same UID |
| ●**ATTENDEE** | 1+ | |
| ●**DTSTAMP** | 1 | |
| ●**DTSTART** | 1 | |
| ●**ORGANIZER** | 1 | |
| ●**SEQUENCE** | 0 or 1 | MUST be present if value is greater than 0, MAY be present if 0. |
| ●**SUMMARY** | 1 | Can be null. |
| ●**UID** | 1 | |
| ●**ATTACH** | 0+ | |
| ●**CATEGORIES** | 0+ | |
| ●**CLASS** | 0 or 1 | |
| ●**COMMENT** | 0+ | |
| ●**CONTACT** | 0+ | |
| ●**CREATED** | 0 or 1 | |
| ●**DESCRIPTION** | 0 or 1 | Can be null. |
| ●**DTEND** | 0 or 1 | If present, **DURATION** MUST NOT be present. |
| ●**DURATION** | 0 or 1 | If present, **DTEND** MUST NOT be present. |
| ●**EXDATE** | 0+ | |
| ●**GEO** | 0 or 1 | |
| ●**LAST-MODIFIED** | 0 or 1 | |
| ●**LOCATION** | 0 or 1 | |

| Component/property | Presence | |
|---|---|---|
| ●PRIORITY | 0 or 1 | |
| ●RDATE | 0+ | |
| ●RECURRENCE-ID | 0 or 1 | Only if referring to an instance of a recurring calendar component. Otherwise, it MUST NOT be present. |
| ●RELATED-TO | 0+ | |
| ●REQUEST-STATUS | 0+ | |
| ●RESOURCES | 0+ | |
| ●RRULE | 0 or 1 | |
| ●STATUS | 0 or 1 | MAY be one of TENTATIVE/CONFIRMED. |
| ●TRANSP | 0 or 1 | |
| ●URL | 0 or 1 | |
| •IANA-PROPERTY | 0+ | |
| ●X-PROPERTY | 0+ | |
| ●VALARM | 0+ | |
| VTIMEZONE | 0+ | MUST be present if any date/time refers to a timezone. |
| IANA-COMPONENT | 0+ | |
| X-COMPONENT | 0+ | |
| VFREEBUSY | 0 | |
| VJOURNAL | 0 | |
| VTODO | 0 | |

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

The following table specifies the number of instances Outlook exports for these components and properties in a REQUEST-type iCalendar object.

| Component/property | Number of instances exported | Notes |
|---|---|---|
| METHOD | 1 | Is set to "REQUEST". |
| VEVENT | 1+ | All components MUST have the same **UID** value. |
| ●ATTENDEE | 0+ | See section 2.2.9 |
| ●DTSTAMP | 1 | |
| ●DTSTART | 1 | |
| ●ORGANIZER | 1 | |
| ●SEQUENCE | 0 or 1 | Can be 0. |
| ●SUMMARY | 1 | See section 2.2.10 |

| Component/property | Number of instances exported | Notes |
|---|---|---|
| ●**UID** | 1 | |
| ●**ATTACH** | 0+ | |
| ●**SEQUENCE** | 0 or 1 | MUST be present if value is greater than 0, MAY be present if 0. |
| ●**CATEGORIES** | 0 or 1 | Can be a list. |
| ●**CLASS** | 0 or 1 | |
| ●**COMMENT** | 0 or 1 | |
| ●**CONTACT** | 0+ | |
| ●**CREATED** | 0 or 1 | |
| ●**DESCRIPTION** | 0 or 1 | Can be an empty string. |
| ●**DTEND** | 1 | |
| ●**DURATION** | 0 | |
| ●**EXDATE** | 0-1 | |
| ●**EXRULE** | 0 | |
| ●**GEO** | 0 | |
| ●**LAST-MODIFIED** | 0-1 | |
| ●**LOCATION** | 0-1 | |
| ●**PRIORITY** | 0-1 | |
| ●**RDATE** | 0-2 | |
| ●**RECURRENCE-ID** | 0-1 | |
| ●**RELATED-TO** | 0 | |
| ●**REQUEST-STATUS** | 0 | |
| ●**RESOURCES** | 0-1 | Can be a list. |
| ●**RRULE** | 0-1 | |
| ●**STATUS** | 0 | |
| ●**TRANSP** | 0-1 | |
| ●**URL** | 0 | |
| •**IANA-PROPERTY** | 0 | |
| •**X-PROPERTY** | 0-34 | |
| •**VALARM** | 0-1 | |
| **VTIMEZONE** | 0+ | A VTIMEZONE is exported for each unique *TZID* parameter in the iCalendar object. |

| Component/property | Number of instances exported | Notes |
|---|---|---|
| **IANA-COMPONENT** | 0 | |
| **X-COMPONENT** | 0 | |
| **VFREEBUSY** | 0 | |
| **VJOURNAL** | 0 | |
| **VTODO** | 0 | |

The following table specifies the number of instances Outlook imports for these components and properties in a REQUEST-type iCalendar object. If more instances are found, they are ignored. If fewer instances are found, the outer component is considered invalid and ignored.

| Component/Property | Number of instances imported | Notes |
|---|---|---|
| **METHOD** | 1 | MUST be set to "REQUEST". |
| **VEVENT** | 1+ | All components MUST have the same UID value. |
| ●**ATTENDEE** | 0+ | See section 2.1.15 |
| ●**DTSTAMP** | 0-1 | |
| ●**DTSTART** | 0-1 | |
| ●**ORGANIZER** | 0-1 | |
| ●**SEQUENCE** | 0-1 | Can import 0. |
| ●**SUMMARY** | 0-1 | Can import an empty string. |
| ●**UID** | 0-1 | |
| ●**ATTACH** | 0+ | |
| ●**CATEGORIES** | 0+ | Can import a list. |
| ●**CLASS** | 0-1 | |
| ●**COMMENT** | 0-1 | If multiple **COMMENT** properties are present, only the last one is imported. |
| ●**CONTACT** | 0+ | |
| ●**CREATED** | 0 | |
| ●**DESCRIPTION** | 0-1 | Can import an empty string. |
| ●**DTEND** | 0-1 | If both **DTEND** and **DURATION** are present, **DTEND** is used. |
| ●**DURATION** | 0-1 | If both **DTEND** and **DURATION** are present, **DTEND** is used. |
| ●**EXDATE** | 0+ | |
| ●**EXRULE** | 0 | |
| ●**GEO** | 0 | |

| Component/Property | Number of instances imported | Notes |
|---|---|---|
| ●LAST-MODIFIED | 0 | |
| ●LOCATION | 0-1 | |
| ●PRIORITY | 0-1 | |
| ●RDATE | 0+ | |
| ●RECURRENCE-ID | 0-1 | Assumed to refer to an instance of a recurring appointment. |
| ●RELATED-TO | 0 | |
| ●REQUEST-STATUS | 0 | |
| ●RESOURCES | 0+ | Can import a list. |
| ●RRULE | 0-1 | |
| ●STATUS | 0-1 | Can import "TENTATIVE" or "CONFIRMED". |
| ●TRANSP | 0-1 | |
| ●URL | 0 | |
| •IANA-PROPERTY | 0 | |
| •X-PROPERTY | 0+ | |
| •VALARM | 0-1 | |
| VTIMEZONE | 0+ | If a TZID references an undeclared VTIMEZONE, a default time zone is used. |
| IANA-COMPONENT | 0 | |
| X-COMPONENT | 0 | |
| VFREEBUSY | 0 | |
| VJOURNAL | 0 | |
| VTODO | 0 | |

## 2.2.111 [RFC5546] Section 3.2.2.1 Rescheduling an Event

V0246:

The specification states that the REQUEST method may be used to reschedule an event.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can export REQUEST-type iCalendar objects to reschedule an event. Outlook can import REQUEST-type iCalendar objects that reschedule an event.

### 2.2.112 [RFC5546] Section 3.2.2.2 Updating or Reconfirmation of an Event

V0247:

The specification states that the REQUEST method may be used to update or reconfirm an event.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can export REQUEST-type iCalendar objects to update or reconfirm an event. Outlook can import REQUEST-type iCalendar objects that update or reconfirm an event.

V0248:

The specification states that the organizer of an event may send unsolicited REQUESTmethods.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook permits the organizer to resend meeting requests at any time. Outlook allows attendees to respond to resent meeting requests.

### 2.2.113 [RFC5546] Section 3.2.2.3 Delegating an Event to Another CU

C0024:

The specification describes methodology to support allowing attendees to delegate their presence at an event to another calendar user. It states that implementations may support or restrict delegation as they see fit. It then describes a number of required behaviors (using MUST).

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

It is assumed that the "MUST" statements in this section are contingent on the implementation choosing to support delegation. Outlook does not implement the type of delegation, as specified in [RFC5546].

### 2.2.114 [RFC5546] Section 3.2.2.4 Changing the Organizer

V0249:

The specification states that the new organizer should send a REQUEST with a modified version of the VEVENT in which the **SEQUENCE** number has been incremented and the value of **ORGANIZER** has been changed to the calendar address of the new organizer.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not allow users to reassign the **ORGANIZER** property. However, Outlook can import REQUEST-type iCalendar objects that update the **ORGANIZER** property.

### 2.2.115 [RFC5546] Section 3.2.2.5 Sending on Behalf of the Organizer

V0250:

The specification states that using the "sent-by" parameter, a calendar user could send an updated VEVENT REQUEST. In the case where one calendar user sends on behalf of another calendar user, the attendee responses are still directed back towards the calendar user designated as the organizer.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook indicates that a user is sending a REQUEST-type iCalendar object on behalf of the **ORGANIZER** using the **X-MS-OLK-SENDER** property ([MS-OXCICAL] section 2.1.3.1.1.20.61). Outlook sends responses to the **ORGANIZER**.

On import, Outlook ignores all instances of the *SENT-BY* parameter.

## 2.2.116    [RFC5546] Section 3.2.2.6 Forwarding to an Uninvited CU

V0251:

The specification states that an attendee invited to an event may invite another uninvited calendar user to the event. The invited attendee accomplishes this by forwarding the original REQUEST method to the uninvited calendar user.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook allows attendees to forward meeting requests to uninvited users, but the **ORGANIZER** property is changed to the calendar user that forwarded the request. Outlook can import forwarded meeting requests.

V0252:

The specification states that if the organizer decides not to add the uninvited calendar user no further action is required, however the organizer MAY send the uninvited calendar user a CANCEL message.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not give the organizer the option to send a CANCEL message to the uninvited calendar user. On import, if Outlook receives a REPLY-type iCalendar from an uninvited calendar user, the message is shown to the organizer, but no updates are made to the meeting.

## 2.2.117    [RFC5546] Section 3.2.2.7 Updating Attendee Status

V0253:

The specification states that the organizer of an event may request updated status from one or more attendees.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook allows the organizer to resend a meeting request at any time. Outlook allows attendees to respond to resent meeting requests.

V0254:

The specification states that the recipient SHOULD respond with a "REPLY" method indicating their current status with respect to the REQUEST.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook allows users to respond to resent meeting requests. Outlook can process responses to resent meeting requests.

## 2.2.118    [RFC5546] Section 3.2.3 REPLY

V0255:

The specification states that when a REPLY is used to provide a delegation response, the "Delegator" SHOULD include the calendar address of the "Delegate" on the "delegated-to" property parameter of

the "Delegator's" **ATTENDEE** property. The "Delegate" SHOULD include the calendar address of the "Delegator" on the "delegated-from" property parameter of the "Delegate's" **ATTENDEE** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not support this type of delegation and does not export or import the **DELEGATED-TO** or **DELEGATED-FROM** property parameters.

V0256:

The specification states that the REPLY method may be used to respond to an unsuccessful REQUEST method. Depending on the value of the **REQUEST-STATUS** property no scheduling action may have been performed.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the **REQUEST-STATUS** property. On import, Outlook ignores the **REQUEST-STATUS** property.

V0257:

The specification states that the organizer of an event may receive a REPLY method from a calendar user not in the original REQUEST. For example, a "REPLY" may be received from a "Delegate" to an event. In addition, the reply METHOD may be received from an unknown calendar user (a "Party Crasher"). This uninvited calendar user may be accepted, or the organizer may cancel the event for the uninvited attendee by sending a CANCEL method to the uninvited attendee.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook permits the user to send REPLY-type iCalendar objects even if the user is not on the **ATTENDEE** list. Outlook does not give the organizer the option to send a CANCEL-type iCalendar object to uninvited calendar users.

On import, if Outlook receives a REPLY from an uninvited calendar user, the message is shown to the organizer, but no updates are made to the meeting. Outlook treats CANCEL-type iCalendar objects received by uninvited attendees the same as CANCEL-type iCalendar objects received by invited attendees.

V0258:

The specification states that an attendee can include a message to the organizer in a REPLY using the **COMMENT** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports any text from the **ATTENDEE** to the **ORGANIZER** in the **COMMENT** property. On import, Outlook imports the **COMMENT** property as text from the **ATTENDEE** to the **ORGANIZER**.

V0259:

The specification states that the organizer may receive a REPLY from one calendar user on behalf of another calendar user by using the *SENT-BY* parameter.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the *SENT-BY* parameter. On import, Outlook ignores the *SENT-BY* parameter.

C0025:

The specification lists a VALARM component in the table of allowed components and properties in a REPLY-type iCalendar object. The indentation of the VALARM component is the same as the VEVENT component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

V0260:

The specification specifies the allowed number of instances of components and properties in a REPLY-type iCalendar object in the following table.

| Component/property | Presence | |
|---|---|---|
| **METHOD** | 1 | MUST equal "REPLY". |
| **VEVENT** | 1+ | All components MUST have the same UID. |
| ●**ATTENDEE** | 1 | MUST be the address of the Attendee replying. |
| ●**DTSTAMP** | 1 | |
| ●**ORGANIZER** | 1 | |
| ●**RECURRENCE-ID** | 0 or 1 | Only if referring to an instance of a recurring calendar component. Otherwise, it MUST NOT be present. |
| ●**UID** | 1 | MUST be the UID of the original REQUEST. |
| ●**SEQUENCE** | 0 or 1 | if non-zero, MUST be the sequence number of the original REQUEST. MAY be present if 0. |
| ●**ATTACH** | 0+ | |
| ●**CATEGORIES** | 0+ | |
| ●**CLASS** | 0 or 1 | |
| ●**COMMENT** | 0+ | |
| ●**CONTACT** | 0+ | |
| ●**CREATED** | 0 or 1 | |
| ●**DESCRIPTION** | 0 or 1 | |
| ●**DTEND** | 0 or 1 | If present, **DURATION** MUST NOT be present. |
| ●**DTSTART** | 0 or 1 | |
| ●**DURATION** | 0 or 1 | If present, **DTEND** MUST NOT be present. |
| ●**EXDATE** | 0+ | |
| ●**GEO** | 0 or 1 | |
| ●**LAST-MODIFIED** | 0 or 1 | |
| ●**LOCATION** | 0 or 1 | |
| ●**PRIORITY** | 0 or 1 | |
| ●**RDATE** | 0+ | |
| ●**RELATED-TO** | 0+ | |

| Component/property | Presence | |
|---|---|---|
| ●**RESOURCES** | 0+ | |
| ●**REQUEST-STATUS** | 0+ | |
| ●**RRULE** | 0 or 1 | |
| ●**STATUS** | 0 or 1 | |
| ●**SUMMARY** | 0 or 1 | |
| ●**TRANSP** | 0 or 1 | |
| ●**URL** | 0 or 1 | |
| •**IANA-PROPERTY** | 0+ | |
| ●**X-PROPERTY** | 0+ | |
| ●**VALARM** | 0 | |
| **VTIMEZONE** | 0 or 1 | MUST be present if any date/time refers to a timezone. |
| **IANA-COMPONENT** | 0+ | |
| **X-COMPONENT** | 0+ | |
| **VFREEBUSY** | 0 | |
| **VJOURNAL** | 0 | |
| **VTODO** | 0 | |

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

The following table specifies the number of instances Outlook exports for these components and properties in a REPLY-type iCalendar object.

| Component/property | Number of instances exported | Notes |
|---|---|---|
| **METHOD** | 1 | Is set to "REPLY". |
| **VEVENT** | 1 | Outlook only exports one VEVENT in a REPLY. |
| ●**ATTENDEE** | 1 | Is set to the address of the sender. |
| ●**DTSTAMP** | 1 | |
| ●**ORGANIZER** | 0 | See section 2.2.12. |
| ●**RECURRENCE-ID** | 0-1 | |
| ●**UID** | 1 | Same value as the original REQUEST. |
| ●**SEQUENCE** | 0 or 1 | Unable to resolve out-of-order delivery of messages. |
| ●**ATTACH** | 0+ | |
| ●**CATEGORIES** | 0-1 | Can be a list. |
| ●**CLASS** | 0-1 | |

| Component/property | Number of instances exported | Notes |
|---|---|---|
| ●**COMMENT** | 0-1 | |
| ●**CONTACT** | 0-1 | |
| ●**CREATED** | 0-1 | |
| ●**DESCRIPTION** | 0-1 | |
| ●**DTEND** | 1 | |
| ●**DTSTART** | 1 | |
| ●**DURATION** | 0 | |
| ●**EXDATE** | 0-1 | |
| ●**EXRULE** | 0 | |
| ●**GEO** | 0 | |
| ●**LAST-MODIFIED** | 0-1 | |
| ●**LOCATION** | 0-1 | |
| ●**PRIORITY** | 0-1 | |
| ●**RDATE** | 0-2 | |
| ●**RELATED-TO** | 0 | |
| ●**RESOURCES** | 0-1 | Can be a list. |
| ●**REQUEST-STATUS** | 0 | |
| ●**RRULE** | 0-1 | |
| ●**STATUS** | 0 | |
| ●**TRANSP** | 0-1 | |
| ●**URL** | 0 | |
| •**IANA-PROPERTY** | 0 | |
| ●**X-PROPERTY** | 0 | |
| ●**VTIMEZONE** | 0-1 | A VTIMEZONE is exported for each unique *TZID* parameter in the iCalendar object. |
| **IANA-COMPONENT** | 0 | |
| **X-COMPONENT** | 0 | |
| ●**VALARM** | 0-1 | |
| **VFREEBUSY** | 0 | |
| **VJOURNAL** | 0 | |
| **VTODO** | 0 | |

The following table specifies the number of instances Outlook imports for these components and properties in a REPLY-type iCalendar object. If more instances are found, they are ignored. If fewer instances are found, the outer component is considered invalid and ignored.

| Component/property | Number of instances imported | Notes |
|---|---|---|
| **METHOD** | 1 | MUST be set to "REPLY". |
| **VEVENT** | 1 | Outlook only imports the first VEVENT. |
| ●**ATTENDEE** | 1+ | Exactly one **ATTENDEE** property MUST have the *PARTSTAT* parameter set or the import fails. |
| ●**DTSTAMP** | 0-1 | |
| ●**ORGANIZER** | 0-1 | |
| ●**RECURRENCE-ID** | 0-1 | |
| ●**UID** | 1 | |
| ●**SEQUENCE** | 0-1 | Used to resolve out-of-order delivery of messages. |
| ●**ATTACH** | 0+ | |
| ●**CATEGORIES** | 0+ | Can import a list. |
| ●**CLASS** | 0-1 | |
| ●**COMMENT** | 0-1 | If multiple **COMMENT** properties are present, only the last one is imported. |
| ●**CONTACT** | 0+ | |
| ●**CREATED** | 0 | |
| ●**DESCRIPTION** | 0-1 | |
| ●**DTEND** | 0-1 | If both **DTEND** and **DURATION** are specified, **DTEND** is used. |
| ●**DTSTART** | 0-1 | |
| ●**DURATION** | 0-1 | If both **DTEND** and **DURATION** are specified, **DTEND** is used. |
| ●**EXDATE** | 0+ | |
| ●**EXRULE** | 0 | |
| ●**GEO** | 0 | |
| ●**LAST-MODIFIED** | 0 | |
| ●**LOCATION** | 0-1 | |
| ●**PRIORITY** | 0-1 | |
| ●**RDATE** | 0+ | |
| ●**RELATED-TO** | 0 | |
| ●**RESOURCES** | 0+ | |

| Component/property | Number of instances imported | Notes |
|---|---|---|
| ●REQUEST-STATUS | 0 | Can import a list. |
| ●RRULE | 0-1 | |
| ●STATUS | 0-1 | |
| ●TRANSP | 0-1 | |
| ●URL | 0 | |
| •IANA-PROPERTY | 0 | |
| ●X-PROPERTY | 0+ | |
| VTIMEZONE | 0+ | If a TZID references an undeclared VTIMEZONE, a default time zone is used. |
| IANA-COMPONENT | 0 | |
| X-COMPONENT | 0 | |
| ●VALARM | 0-1 | |
| VFREEBUSY | 0 | |
| VJOURNAL | 0 | |
| VTODO | 0 | |

## 2.2.119    [RFC5546] Section 3.2.4 ADD

V0261:

The specification describes the ADD value for the **METHOD** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export ADD-type iCalendar objects. On import, Outlook treats ADD-type iCalendar objects as PUBLISH-type iCalendar objects. See section 2.2.110 for more details.

## 2.2.120    [RFC5546] Section 3.2.5 CANCEL

V0262:

The specification states that to cancel the complete range of a recurring event, the **UID** property value for the event MUST be specified and a **RECURRENCE-ID** MUST NOT be specified in the CANCEL method.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can import and export CANCEL-type iCalendar objects that conform to this requirement.

V0263:

The specification states that in order to cancel an individual instance of the event, the **RECURRENCE-ID** property value for the event MUST be specified in the CANCEL method.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can import and export CANCEL-type iCalendar objects that conform to this requirement.

V0264:

The specification states that there are two options for cancelling a sequence of instances of a recurring VEVENT calendar component:

(a) The **RECURRENCE-ID** property for an instance in the sequence MUST be specified with the *RANGE* property parameter value of THISANDPRIOR (or THISANDFUTURE) to indicate cancellation of the specified VEVENT calendar component and all instances before (or after).

(b) Individual recurrence instances may be cancelled by specifying multiple **VEVENT** components, each with a **RECURRENCE-ID** property corresponding to one of the instances to be cancelled.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the *RANGE* parameter, therefore Outlook does not use option (a). Outlook does not export more than one **RECURRENCE-ID** property per VEVENT component. Outlook cancels multiple instances of a recurring event by exporting multiple CANCEL-type iCalendar objects, each containing exactly one VEVENT component with one **RECURRENCE-ID** property.

On import, Outlook ignores all instances of the *RANGE* parameter.

C0026:

The specification lists a VALARM component in the table of allowed components and properties in a CANCEL-type iCalendar object. The indentation of the VALARM component is the same as the VEVENT component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

It is assumed that the author intended to indent the VALARM component to visually indicate that it is a sub-component of the VEVENT.

V0265:

The specification specifies the allowed number of instances of components and properties in a CANCEL-type iCalendar object in the following table:

| Component/property | Presence | |
|---|---|---|
| **METHOD** | 1 | Must be "CANCEL". |
| **VEVENT** | 1+ | All must have the same **UID**. |
| ●**ATTENDEE** | 0+ | MUST include all "Attendees" being removed the event. MUST include all "Attendees" if the entire event is cancelled. |
| ●**DTSTAMP** | 1 | |
| ●**ORGANIZER** | 1 | |
| ●**SEQUENCE** | 1 | |
| ●**UID** | 1 | MUST be the **UID** of the original REQUEST. |
| ●**COMMENT** | 0+ | |
| ●**ATTACH** | 0+ | |

| Component/property | Presence | |
|---|---|---|
| ●CATEGORIES | 0+ | |
| ●CLASS | 0 or 1 | |
| ●CONTACT | 0+ | |
| ●CREATED | 0 or 1 | |
| ●DESCRIPTION | 0 or 1 | |
| ●DTEND | 0 or 1 | If present, **DURATION** MUST NOT be present. |
| ●DURATION | 0 or 1 | If present, **DTEND** MUST NOT be present. |
| ●EXDATE | 0+ | |
| ●GEO | 0 or 1 | |
| ●LAST-MODIFIED | 0 or 1 | |
| ●LOCATION | 0 or 1 | |
| ●PRIORITY | 0 or 1 | |
| ●RDATE | 0+ | |
| ●RECURRENCE-ID | 0 or 1 | Only if referring to one or more or more recurring instances. Otherwise, it MUST NOT be present. |
| ●RELATED-TO | 0+ | |
| ●RESOURCES | 0+ | |
| ●RRULE | 0 or 1 | |
| ●STATUS | 0 or 1 | MUST be set to CANCELLED. If uninviting specific "Attendees" then MUST NOT be included. |
| ●SUMMARY | 0 or 1 | |
| ●TRANSP | 0 or 1 | |
| ●URL | 0 or 1 | |
| •IANA-PROPERTY | 0+ | |
| ●X-PROPERTY | 0+ | |
| ●VALARM | 0 | |
| VTIMEZONE | 0+ | MUST be present if any date/time refers to a timezone. |
| IANA-COMPONENT | 0+ | |
| X-COMPONENT | 0+ | |
| VTODO | 0 | |
| VJOURNAL | 0 | |
| VFREEBUSY | 0 | |

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

The following table specifies the number of instances Outlook exports for these components and properties in a CANCEL-type iCalendar object.

| Component/property | Number of instances exported | Notes |
| --- | --- | --- |
| **METHOD** | 1 | Is set to "CANCEL". |
| **VEVENT** | 1 | Outlook only exports one VEVENT in a CANCEL. |
| ●**ATTENDEE** | 1+ | One **ATTENDEE** property is exported for each recipient of the cancellation. |
| ●**DTSTAMP** | 1 | |
| ●**ORGANIZER** | 1 | |
| ●**SEQUENCE** | 1 | |
| ●**UID** | 1 | |
| ●**COMMENT** | 0-1 | |
| ●**ATTACH** | 0+ | |
| ●**CATEGORIES** | 0-1 | Can be a list. |
| ●**CLASS** | 0-1 | |
| ●**CONTACT** | 0+ | |
| ●**CREATED** | 0-1 | |
| ●**DESCRIPTION** | 0-1 | |
| ●**DTEND** | 1 | |
| ●**DTSTART** | 1 | |
| ●**DURATION** | 0 | |
| ●**EXDATE** | 0-1 | |
| ●**EXRULE** | 0 | |
| ●**GEO** | 0 | |
| ●**LAST-MODIFIED** | 0-1 | |
| ●**LOCATION** | 0-1 | |
| ●**PRIORITY** | 0-1 | |
| ●**RDATE** | 0-2 | |
| ●**RECURRENCE-ID** | 0-1 | |
| ●**RELATED-TO** | 0 | |
| ●**RESOURCES** | 0-1 | Can be a list. |
| ●**REQUEST-STATUS** | 0 | |
| ●**RRULE** | 0-1 | |

| Component/property | Number of instances exported | Notes |
|---|---|---|
| ●STATUS | 0 | |
| ●SUMMARY | 0-1 | |
| ●TRANSP | 0-1 | |
| ●URL | 0 | |
| •IANA-PROPERTY | 0 | |
| ●X-PROPERTY | 0+ | |
| VTIMEZONE | 0+ | A VTIMEZONE is exported for each unique *TZID* parameter in the iCalendar object. |
| IANA-COMPONENT | 0 | |
| X-COMPONENT | 0 | |
| ●VALARM | 0 | |
| VFREEBUSY | 0 | |
| VJOURNAL | 0 | |
| VTODO | 0 | |

The following table specifies the number of instances Outlook imports for these components and properties in a CANCEL-type iCalendar object. If more instances are found, they are ignored. If fewer instances are found, the outer component is considered invalid and ignored.

| Component/property | Number of instances imported | Notes |
|---|---|---|
| METHOD | 1 | MUST be set to "CANCEL". |
| VEVENT | 1 | Outlook only imports the first VEVENT in a CANCEL. |
| ●ATTENDEE | 0+ | ATTENDEE is only used in rendering the message to the user, it does not affect scheduling logic. |
| ●DTSTAMP | 0-1 | |
| ●ORGANIZER | 0-1 | |
| ●SEQUENCE | 0-1 | |
| ●UID | 1 | |
| ●COMMENT | 0-1 | If multiple **COMMENT** properties are present, only the last one is imported. |
| ●ATTACH | 0+ | |
| ●CATEGORIES | 0+ | Can import a list. |
| ●CLASS | 0-1 | |
| ●CONTACT | 0+ | |
| ●CREATED | 0 | |

| Component/property | Number of instances imported | Notes |
|---|---|---|
| ●DESCRIPTION | 0-1 | |
| ●DTEND | 0-1 | If both **DTEND** and **DURATION** are specified, **DTEND** is used. |
| ●DTSTART | 0-1 | |
| ●DURATION | 0-1 | If both **DTEND** and **DURATION** are specified, **DTEND** is used. |
| ●EXDATE | 0+ | |
| ●EXRULE | 0 | |
| ●GEO | 0 | |
| ●LAST-MODIFIED | 0 | |
| ●LOCATION | 0-1 | |
| ●PRIORITY | 0-1 | |
| ●RDATE | 0+ | |
| ●RECURRENCE-ID | 0-1 | |
| ●RELATED-TO | 0 | |
| ●RESOURCES | 0+ | Can import a list. |
| ●REQUEST-STATUS | 0 | |
| ●RRULE | 0-1 | |
| ●STATUS | 0-1 | **STATUS** is only used in rendering the message to the user; it does not affect scheduling logic. |
| ●SUMMARY | 0-1 | |
| ●TRANSP | 0-1 | |
| ●URL | 0 | |
| •IANA-PROPERTY | 0 | |
| ●X-PROPERTY | 0+ | |
| VTIMEZONE | 0+ | If a *TZID* parameter references an undefined VTIMEZONE, a default time zone is used. |
| IANA-COMPONENT | 0 | |
| X-COMPONENT | 0 | |
| ●VALARM | 0 | |
| VFREEBUSY | 0 | |
| VJOURNAL | 0 | |
| VTODO | 0 | |

## 2.2.121   [RFC5546] Section 3.2.6 REFRESH

V0266:

The specification describes the REFRESH value for the **METHOD** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export REFRESH-type iCalendar objects. On import, Outlook treats REFRESH-type iCalendar objects as PUBLISH-type iCalendar objects. See section 2.2.110 for more details.

## 2.2.122   [RFC5546] Section 3.2.7 COUNTER

V0267:

The specification states that a counter proposal is an iCalendar object consisting of a VEVENT calendar component describing the complete description of the alternate event.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook only exports counter proposals to the start and/or end time of a meeting. On import, Outlook renders all of the properties in the VEVENT of a COUNTER-type iCalendar object to the user. However, if the organizer accepts the counter proposal, only the start and/or end time of the meeting is updated.

C0027:

The specification lists a VALARM component in the table of allowed components and properties in a COUNTER-type iCalendar object. The indentation of the VALARM component is the same as the VEVENT component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

It is assumed that the author intended to indent the VALARM component to visually indicate that it is a sub-component of the VEVENT.

C0028:

The table in [RFC5546] contains a value of "1" for the **SEQUENCE** property in the VEVENT component of a CANCEL-type iCalendar object. However, this is contradicted by the comment in the table: "MUST be present if value greater than 0, MAY be present if 0."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook conforms to the comment in the table. It is assumed that the value of "1" was intended to be "0 or 1".

V0268:

The specification specifies the allowed number of instances of components and properties in a COUNTER-type iCalendar object in the following table.

| Component/property | Presence | |
|---|---|---|
| **METHOD** | 1 | MUST be "COUNTER". |
| **VEVENT** | 1 | |

| Component/property | Presence | |
|---|---|---|
| ●**DTSTAMP** | 1 | |
| ●**DTSTART** | 1 | |
| ●**ORGANIZER** | 1 | MUST be the "Organizer" of the original event |
| ●**SEQUENCE** | 1 | MUST echo the original SEQUENCE number. MUST be present if non-zero. MAY be present if zero. |
| ●**SUMMARY** | 1 | Can be null. |
| ●**UID** | 1 | MUST be the **UID** associated with the REQUEST being countered. |
| ●**ATTACH** | 0+ | |
| ●**ATTENDEE** | 0+ | Can also be used to propose other Attendees. |
| ●**CATEGORIES** | 0+ | |
| ●**CLASS** | 0 or 1 | |
| ●**COMMENT** | 0+ | |
| ●**CONTACT** | 0+ | |
| ●**CREATED** | 0 or 1 | |
| ●**DESCRIPTION** | 0 or 1 | |
| ●**DTEND** | 0 or 1 | If present, **DURATION** MUST NOT be present. |
| ●**DURATION** | 0 or 1 | If present, **DTEND** MUST NOT be present. |
| ●**EXDATE** | 0+ | |
| ●**GEO** | 0 or 1 | |
| ●**LAST-MODIFIED** | 0 or 1 | |
| ●**LOCATION** | 0 or 1 | |
| ●**PRIORITY** | 0 or 1 | |
| ●**RDATE** | 0+ | |
| ●**RECURRENCE-ID** | 0 or 1 | Only if referring to an instance of a recurring calendar component. Otherwise, it MUST NOT be present. |
| ●**RELATED-TO** | 0+ | |
| ●**RESOURCES** | 0+ | This property may contain a list of values. |
| ●**REQUEST-STATUS** | 0+ | |
| ●**RRULE** | 0 or 1 | |
| ●**STATUS** | 0 or 1 | Value must be one of CONFIRMED/TENTATIVE/CANCELLED. |
| ●**TRANSP** | 0 or 1 | |
| ●**URL** | 0 or 1 | |
| •**IANA-PROPERTY** | 0+ | |

| Component/property | Presence | |
|---|---|---|
| ●X-PROPERTY | 0+ | |
| ●VALARM | 0 | |
| VTIMEZONE | 0+ | MUST be present if any date/time refers to a timezone. |
| IANA-COMPONENT | 0+ | |
| X-COMPONENT | 0+ | |
| VTODO | 0 | |
| VJOURNAL | 0 | |
| VFREEBUSY | 0 | |

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

The following table specifies the number of instances Outlook exports for these components and properties in a COUNTER-type iCalendar object.

| Component/property | Number of instances exported | Notes |
|---|---|---|
| METHOD | 1 | Is set to "COUNTER". |
| VEVENT | 1 | |
| ●ATTENDEE | 1 | Set to the address of the sender. Outlook does not support counter-proposal of new attendees. |
| ●DTSTAMP | 1 | |
| ●DTSTART | 1 | |
| ●ORGANIZER | 0 | See section 2.1.19. |
| ●SEQUENCE | 0-1 | |
| ●UID | 1 | Set to the same value as the **UID** in the original REQUEST. |
| ●COMMENT | 0-1 | |
| ●ATTACH | 0+ | |
| ●CATEGORIES | 0-1 | Can be a list. |
| ●CLASS | 0-1 | |
| ●CONTACT | 0-1 | |
| ●CREATED | 0-1 | |
| ●DESCRIPTION | 0-1 | |
| ●DTEND | 1 | |
| ●DURATION | 0 | |
| ●EXDATE | 0-1 | |
| ●EXRULE | 0 | |

| Component/property | Number of instances exported | Notes |
|---|---|---|
| ●GEO | 0 | |
| ●LAST-MODIFIED | 0-1 | |
| ●LOCATION | 0-1 | |
| ●PRIORITY | 0-1 | |
| ●RDATE | 0-2 | |
| ●RECURRENCE-ID | 0-1 | |
| ●RELATED-TO | 0 | |
| ●RESOURCES | 0-1 | Can be a list. |
| ●REQUEST-STATUS | 0 | |
| ●RRULE | 0-1 | |
| ●STATUS | 0 | |
| ●SUMMARY | 0-1 | Can be an empty string. |
| ●TRANSP | 0-1 | |
| ●URL | 0 | |
| •IANA-PROPERTY | 0 | |
| ●X-PROPERTY | 0 | |
| VTIMEZONE | 0-1 | A VTIMEZONE is exported for each unique *TZID* parameter in the iCalendar object. |
| IANA-COMPONENT | 0 | |
| X-COMPONENT | 0 | |
| ●VALARM | 0-1 | |
| VFREEBUSY | 0 | |
| VJOURNAL | 0 | |
| VTODO | 0 | |

The following table specifies the number of instances Outlook imports for these components and properties in a COUNTER-type iCalendar object. If more instances are found, they are ignored. If fewer instances are found, the outer component is considered invalid and ignored.

| Component/Property | Number of instances imported | Notes |
|---|---|---|
| METHOD | 1 | MUST be set to "COUNTER". |
| VEVENT | 1 | |
| ●ATTENDEE | 1+ | Exactly one **ATTENDEE** property MUST have the *PARTSTAT* parameter set, or the import fails. All other attendees are |

| Component/Property | Number of instances imported | Notes |
|---|---|---|
| | | ignored. |
| ●**DTSTAMP** | 0-1 | |
| ●**DTSTART** | 0-1 | |
| ●**ORGANIZER** | 0-1 | **ORGANIZER** is only used to render the message. |
| ●**SEQUENCE** | 0-1 | |
| ●**UID** | 1 | |
| ●**COMMENT** | 0-1 | If multiple **COMMENT** properties are present, only the last one is imported. |
| ●**ATTACH** | 0+ | |
| ●**CATEGORIES** | 0+ | Can import a list. |
| ●**CLASS** | 0-1 | |
| ●**CONTACT** | 0+ | |
| ●**CREATED** | 0 | |
| ●**DESCRIPTION** | 0-1 | |
| ●**DTEND** | 0-1 | If both **DTEND** and **DURATION** are specified, **DTEND** is used. |
| ●**DURATION** | 0-1 | If both **DTEND** and **DURATION** are specified, **DTEND** is used. |
| ●**EXDATE** | 0+ | |
| ●**EXRULE** | 0 | |
| ●**GEO** | 0 | |
| ●**LAST-MODIFIED** | 0 | |
| ●**LOCATION** | 0-1 | |
| ●**PRIORITY** | 0-1 | |
| ●**RDATE** | 0+ | |
| ●**RECURRENCE-ID** | 0-1 | |
| ●**RELATED-TO** | 0 | |
| ●**RESOURCES** | 0+ | Can import a list. |
| ●**REQUEST-STATUS** | 0 | |
| ●**RRULE** | 0-1 | |
| ●**STATUS** | 0-1 | **STATUS** is only used to render the message. |
| ●**SUMMARY** | 0-1 | Can be an empty string. |
| ●**TRANSP** | 0-1 | |

| Component/Property | Number of instances imported | Notes |
|---|---|---|
| ●URL | 0 | |
| •IANA-PROPERTY | 0 | |
| ●X-PROPERTY | 0+ | |
| VTIMEZONE | 0+ | If *TZID* references an undeclared VTIMEZONE, a default time zone is used. |
| IANA-COMPONENT | 0 | |
| X-COMPONENT | 0 | |
| ●VALARM | 0-1 | |
| VFREEBUSY | 0 | |
| VJOURNAL | 0 | |
| VTODO | 0 | |

## 2.2.123    [RFC5546] Section 3.2.8 DECLINECOUNTER

V0269:

The specification describes the DECLINECOUNTER value for the **METHOD** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export DECLINECOUNTER-type iCalendar objects. On import, Outlook treats DECLINECOUNTER-type iCalendar objects as PUBLISH-type iCalendar objects. See section 2.2.110 for more details.

## 2.2.124    [RFC5546] Section 3.3 Methods for VFREEBUSY Components

V0270:

The specification defines property sets for the methods that are applicable to VFREEBUSY components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VFREEBUSY components. Outlook ignores VFREEBUSY components on import.

## 2.2.125    [RFC5546] Section 3.3.1 PUBLISH

V0271:

The specification describes the use of PUBLISH with VFREEBUSY components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VFREEBUSY components. Outlook ignores VFREEBUSY components on import. For PUBLISH-type iCalendars objects, this is imported as an empty calendar.

### 2.2.126    [RFC5546] Section 3.3.2 REQUEST

V0272:

The specification describes the use of REQUEST with VFREEBUSY components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VFREEBUSY components. Outlook ignores VFREEBUSY components on import. For REQUEST-type iCalendar objects, the import fails.

### 2.2.127    [RFC5546] Section 3.3.3 REPLY

V0273:

The specification describes the use of REPLY with VFREEBUSY components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VFREEBUSY components. Outlook ignores VFREEBUSY components on import. For REPLY-type iCalendar objects, the import fails.

### 2.2.128    [RFC5546] Section 3.4 Methods for VTODO Components

V0274:

The specification defines property sets for the methods that are applicable to VTODO components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VTODO components. Outlook ignores VTODO components on import.

### 2.2.129    [RFC5546] Section 3.4.1 PUBLISH

V0275:

The specification describes the use of PUBLISH with VTODO components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VTODO components. Outlook ignores VTODO components on import. For PUBLISH-type iCalendars objects, this is imported as an empty calendar.

### 2.2.130    [RFC5546] Section 3.4.2 REQUEST

V0276:

The specification describes the use of REQUEST with VTODO components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VTODO components. Outlook ignores VTODO components on import. For REQUEST-type iCalendar objects, the import fails.

### 2.2.131    [RFC5546] Section 3.4.3 REPLY

V0277:

The specification describes the use of REPLY with VTODO components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VTODO components. Outlook ignores VTODO components on import. For REPLY-type iCalendar objects, the import fails.

### 2.2.132 [RFC5546] Section 3.4.4 ADD

V0278:

The specification describes the use of ADD with VTODO components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VTODO components. Outlook ignores VTODO components on import. For ADD-type iCalendars objects, this is imported as an empty calendar.

### 2.2.133 [RFC5546] Section 3.4.5 CANCEL

V0279:

The specification describes the use of CANCEL with VTODO components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VTODO components. All Outlook ignores VTODO components on import. For CANCEL-type iCalendar objects, the import fails.

### 2.2.134 [RFC5546] Section 3.4.6 REFRESH

V0280:

The specification describes the use of REFRESH with VTODO components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VTODO components. Outlook ignores VTODO components on import. For REFRESH-type iCalendars objects, this is imported as an empty calendar.

### 2.2.135 [RFC5546] Section 3.4.7 COUNTER

V0281:

The specification describes the use of COUNTER with VTODO components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VTODO components. Outlook ignores VTODO components on import. For COUNTER-type iCalendar objects, the import fails.

### 2.2.136 [RFC5546] Section 3.4.8 DECLINECOUNTER

V0282:

The specification describes the use of DECLINECOUNTER with VTODO components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VTODO components. Outlook ignores VTODO components on import. For DECLINECOUNTER-type iCalendars objects, this is imported as an empty calendar.

### 2.2.137   [RFC5546] Section 3.5 Methods for VJOURNAL Components

V0283:

The specification defines property sets for the methods that are applicable to VJOURNAL components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VJOURNAL components. Outlook ignores VJOURNAL components on import.

### 2.2.138   [RFC5546] Section 3.5.1 PUBLISH

V0284:

The specification describes the use of PUBLISH with VJOURNAL components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VJOURNAL components. Outlook ignores VJOURNAL components on import. For PUBLISH-type iCalendars objects, this is imported as an empty calendar.

### 2.2.139   [RFC5546] Section 3.5.2 ADD

V0285:

The specification describes the use of ADD with VJOURNAL components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VJOURNAL components. Outlook ignores VJOURNAL components on import. For ADD-type iCalendar objects, this is imported as an empty calendar.

### 2.2.140   [RFC5546] Section 3.5.3 CANCEL

V0286:

The specification describes the use of CANCEL with VJOURNAL components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export VJOURNAL components. Outlook ignores VJOURNAL components on import. For CANCEL-type iCalendar objects, the import fails.

### 2.2.141   [RFC5546] Section 3.6 Status Replies

V0287:

The specification lists the possible values of **REQUEST-STATUS**.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the **REQUEST-STATUS** property. Outlook ignores all instances of the **REQUEST-STATUS** property on import.

### 2.2.142   [RFC5546] Section 3.7.1 Working with Recurrence Instances

V0288:

The specification states that implementations that choose to maintain per-instance properties (such as **ATTENDEE** property *PARTSTAT* parameter) may do so. However, the protocol does not require per-instance recognition unless the instance itself must be renegotiated.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook stores recurring appointments as a single parent object, with child objects created as needed when a single instance is referenced.

V0289:

The specification states that negotiation may be necessary when a substantive change to the event or to-do has been made (such as changing the start time, end time, due date, or location).

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not permit the organizer to save changes to start time, end time, or location without sending an update to the attendees.

V0290:

The specification states that the organizer can identify a specific recurrence instance using the **RECURRENCE-ID** property.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook allows the organizer to send updates to a specific instance of a recurrence. The resulting iCalendar object contains the **RECURRENCE-ID** property.

On import, Outlook treats VEVENT components with a **RECURRENCE-ID** property as a specific instance of a recurrence.

## 2.2.143 [RFC5546] Section 3.7.2 Attendee Property Considerations

V0291:

The specification states that the **ORGANIZER** property MUST be present on published VEVENT and **VTODO** components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, Outlook does not require the **ORGANIZER** property to be present. Outlook interprets published **VEVENT** components with an **ORGANIZER** as meetings, and ones without an **ORGANIZER** as appointments.

See section 2.2.15 for export behavior.

V0292:

The specification states that only the organizer is allowed to update and redistribute an event or to-do component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook allows calendar users to redistribute meetings organized by another calendar user. Outlook also allows calendar users to update and redistribute appointments that have been imported from a VEVENT with no **ORGANIZER** property.

Outlook can import any PUBLISH-type VEVENT whether or not it has been redistributed or updated by a calendar user other than the organizer.

V0293:

The specification states that a mailto: URI calendar user address, as specified in [RFC2368], representing a group may be used for the **ATTENDEE** property, so the recipient of a REQUEST may not be explicitly listed as an attendee.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can import and export **ATTENDEE** properties with a mailto: URI containing the address of a distribution list.

V0294:

The specification recommends a general approach to finding a calendar user in an attendee list as follows:

1.  Search for the calendar user in the attendee list where "TYPE=INDIVIDUAL".

2.  Failing (1) look for attendees where "TYPE=GROUP" or "TYPE=UNKNOWN", then check if the calendar user is a member of one or more of these groups.

3.  Failing (2) the client may ignore or accept the request as the calendar user wishes.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the *CUTYPE* parameter with a value of "INDIVIDUAL", "GROUP", or "UNKNOWN". Outlook does not export the *MEMBER* parameter.

On import, Outlook does not check if the user is a member of any groups listed as an **ATTENDEE**.

## 2.2.144 [RFC5546] Section 3.7.3 X-Tokens

V0295:

The specification states that to make iCalendar objects extensible, new property types MAY be inserted into components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does export X-Tokens as specified in [MS-OXCICAL]. On import, Outlook ignores all X-Tokens that it does not implement as specified in [MS-OXCICAL].

V0296:

The specification states that a client is not required to make sense of X-Tokens.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook ignores all X-Tokens that it does not implement as specified in [MS-OXCICAL].

V0297:

The specification states that clients are not required to save X-Tokens or use them in replies.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not save or use X-Tokens that it does not implement as specified in [MS-OXCICAL].

## 2.2.145 [RFC5546] Section 5.1 Partial Implementation

V0298:

The specification describes how methods and properties SHOULD fallback in applications that do not support the complete protocol. If a method or property is not addressed in this section, it may be ignored.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook treats methods not addressed in this section as PUBLISH. Outlook ignores properties not implemented by Outlook and not addressed in this section.

## 2.2.146 [RFC5546] Section 5.1.1 Event-Related Fallbacks

C0029:

The tables in [RFC5546] use the term "Required" in the Fallback column. However, the section prior [RFC5546] states that the tables describe how applications SHOULD fallback.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Since the tables follow SHOULD, the information in the tables is interpreted as a recommendation rather than a requirement.

V0299:

The specification uses the following table to specify fallbacks for values of the **METHOD** property.

| Method | Fallback |
|---|---|
| PUBLISH | Required |
| REQUEST | PUBLISH |
| REPLY | Required |
| ADD | Required |
| CANCEL | Required |
| REFRESH | Required |
| COUNTER | Reply with Not Supported |
| DECLINECOUNTER | Required if EVENT-COUNTER is implemented; otherwise reply with Not Supported |

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

The following table specifies how Outlook falls back for unimplemented **METHOD** values:

| Method | Fallback |
|---|---|
| PUBLISH | Implemented |
| REQUEST | Implemented |
| REPLY | Implemented |
| ADD | Not implemented; fall back to PUBLISH |
| CANCEL | Implemented |
| REFRESH | Not implemented, fall back to PUBLISH |

| Method | Fallback |
|---|---|
| COUNTER | Implemented |
| DECLINECOUNTER | Not implemented, fall back to PUBLISH |

V0300:

The specification uses the following table to specify fallbacks for properties in the VCALENDAR component:

| iCalendar Property | Fallback |
|---|---|
| **CALSCALE** | Ignore; assume GREGORIAN |
| **PRODID** | Ignore |
| **METHOD** | Required as described in the Method list above |
| **VERSION** | Ignore |

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

The following table specifies how Outlook falls back for unimplemented **VCALENDAR** properties:

| Property | Fallback |
|---|---|
| **CALSCALE** | Not implemented, treated as "GREGORIAN". |
| **PRODID** | Some values implemented, others treated as "". |
| **METHOD** | Some values implemented, others treated as "PUBLISH". |
| **VERSION** | Some values implemented, others treated as "2.0". |

V0301:

The specification uses the following table to specify fallbacks for event-related components:

| Event-Related Component | Fallback |
|---|---|
| **VALARM** | Reply with Not Supported |
| **VTIMEZONE** | Required if any DateTime value refers to a time zone. |

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

The following table specifies how Outlook falls back for unimplemented event-related components:

| Component | Fallback |
|---|---|
| **VALARM** | Some configurations are implemented, others ignored. |
| **VTIMEZONE** | Some configurations implemented, others ignored. |

V0302:

The specification uses the following table to specify fallbacks for component properties:

| Component Property | Fallback |
|---|---|
| **ATTACH** | Ignore |
| **ATTENDEE** | Required if EVENT-REQUEST is not implemented; otherwise reply with Not Supported |
| **CATEGORIES** | Ignore |
| **CLASS** | Ignore |
| **COMMENT** | Ignore |
| **COMPLETED** | Ignore |
| **CONTACT** | Ignore |
| **CREATED** | Ignore |
| **DESCRIPTION** | Required |
| **DURATION** | Reply with Not Supported |
| **DTSTAMP** | Required |
| **DTSTART** | Required |
| **DTEND** | Required |
| **EXDATE** | Ignore |
| **EXRULE** | Ignore Reply with Not Supported. If implemented, VTIMEZONE MUST also be implemented. |
| **GEO** | Ignore |
| **LAST-MODIFIED** | Ignore |
| **LOCATION** | Required |
| **ORGANIZER** | Ignore |
| **PRIORITY** | Ignore |
| **RELATED-TO** | Ignore |
| **RDATE** | Ignore |
| **RRULE** | Ignore. The first instance occurs on the **DTSTART** property. If implemented, VTIMEZONE MUST also be implemented. |
| **RECURRENCE-ID** | Required if **RRULE** is implemented; otherwise Ignore |
| **REQUEST-STATUS** | Required |
| **RESOURCES** | Ignore |
| **SEQUENCE** | Required |
| **STATUS** | Ignore |
| **SUMMARY** | Ignore |
| **TRANSP** | Required if FREEBUSY is implemented; otherwise Ignore |

| Component Property | Fallback |
|---|---|
| **URL** | Ignore |
| **UID** | Required |
| **X-** | Ignore |

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

The following table specifies how Outlook falls back for unimplemented component properties:

| Component Property | Fallback |
|---|---|
| **ATTACH** | Implemented |
| **ATTENDEE** | Implemented |
| **CATEGORIES** | Implemented |
| **CLASS** | Some values implemented, others treated as "PUBLIC" |
| **COMMENT** | Some cases implemented, others ignored |
| **COMPLETED** | Not implemented, ignored |
| **CONTACT** | Implemented |
| **CREATED** | Not implemented, ignored |
| **DESCRIPTION** | Implemented |
| **DURATION** | Implemented |
| **DTSTAMP** | Implemented |
| **DTSTART** | Implemented |
| **DTEND** | Implemented |
| **EXDATE** | Implemented |
| **EXRULE** | Not implemented, ignored |
| **GEO** | Not implemented, ignored |
| **LAST-MODIFIED** | Not implemented, ignored |
| **LOCATION** | Implemented |
| **ORGANIZER** | Implemented |
| **PRIORITY** | Implemented |
| **RELATED-TO** | Not implemented, ignored |
| **RDATE** | Implemented |
| **RRULE** | Some cases implemented, others cause the VEVENT to be ignored |
| **RECURRENCE-ID** | Implemented |

| Component Property | Fallback |
|---|---|
| **REQUEST-STATUS** | Not implemented, ignored |
| **RESOURCES** | Implemented |
| **SEQUENCE** | Implemented |
| **STATUS** | Partially implemented, approximated into the Busy Status property of an appointment or meeting |
| **SUMMARY** | Implemented |
| **TRANSP** | Implemented |
| **URL** | Not implemented, ignored |
| **X-** | Some X-props implemented, others ignored |

### 2.2.147    [RFC5546] Section 5.1.2 Free/Busy-Related Fallbacks

V0303:

The specification lists fallbacks for **VFREEBUSY** components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export or import **VFREEBUSY** components.

### 2.2.148    [RFC5546] Section 5.1.2 To-Do-Related Fallbacks

V0304:

The specification lists fallbacks for *VTODO* components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export or import *VTODO* components.

### 2.2.149    [RFC5546] Section 5.1.2 Journal-Related Fallbacks

V0305:

The specification lists fallbacks for *VJOURNAL* components.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export or import *VJOURNAL* components.

### 2.2.150    [RFC5546] Section 5.2.1 Cancellation of an Unknown Calendar Component

V0306:

The specification suggests that messages that cannot be correlated that also have a non-zero sequence number be held and not discarded. Implementations MAY age them out if no other messages arrive with the same **UID** property value and a lower sequence number.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook permits recipients to retain iTIP messages. The default behavior after an iTIP message is manually processed by the user is to move it to the "Deleted Items" folder, where the user can still interact with it.

### 2.2.151 [RFC5546] Section 5.2.2 Unexpected Reply from an Unknown Delegate

V0307:

The specification states that when an attendee delegates an item to another calendar user they MUST send a REPLY method to the organizer using the **ATTENDEE** properties to indicate that the request was delegated and to whom.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not permit attendees to delegate invitations to another calendar user. Outlook ignores *DELEGATED-TO* and *DELEGATED-FROM* parameters on import.

V0308:

The specification states that it is possible for an organizer to receive a REPLY from a calendar user not listed as one of the original attendees. The resolution is left to the implementation but it is expected that the calendaring software will either accept the reply or hold it until the related REPLY is received from the delegator.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook allows calendar users not on the original attendee list to send REPLY-type iCalendar objects in response to a forwarded meeting request.

On import, Outlook ignores the *DELEGATED-TO* and *DELEGATED-FROM* parameters. Outlook can import REPLY-type iCalendar objects from uninvited calendar users. However, responses from uninvited calendar users are not tracked in the meeting.

V0309:

The specification states that if the version of the REPLY method is out of date the organizer SHOULD treat the message as a REFRESH message and update the delegate with the correct version.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook permits organizers to add attendees and send out meeting updates. This is not done automatically for the organizer.

Outlook can import and render out-of-date responses, but they are not tracked in the meeting.

### 2.2.152 [RFC5546] Section 5.3 Sequence Number

V0310:

The specification states that under some conditions, a calendar user agent may receive requests and replies with the same **SEQUENCE** property value. The **DTSTAMP** property is utilized as a tie-breaker when two items with the same **SEQUENCE** property value are evaluated.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook allows the user to respond multiple times to a single meeting request. In these cases, Outlook does export items with the same **UID** and **SEQUENCE** number. Outlook increments the sequence number every time the organizer sends out an update to a meeting, but not every time the organizer saves a meeting to an .ics file.

On import, Outlook uses the **DTSTAMP** property as a tie-breaker when evaluating items with the same **UID** and **SEQUENCE** property values.

### 2.2.153 [RFC5546] Section 6.1.1 Spoofing the Organizer

V0311:

The specification states that an iCalendar object that maliciously changes or cancels an existing VEVENT, VTODO, or VJOURNAL component may be constructed by someone other than the organizer and republished or sent to attendees.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can be configured to spoof an organizer. Furthermore, iCalendar text generated by Outlook can be modified outside of Outlook.

On import, Outlook performs some automatic processing of iTIP messages, so a spoofed organizer can cause some modifications to an attendee's copy of the meeting without user interaction.

### 2.2.154 [RFC5546] Section 6.1.2 Spoofing the Attendee

V0312:

The specification states that an iCalendar object that maliciously changes the *ATTENDEE* parameters may be constructed by someone other than the real attendee and sent to the organizer.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook can be configured to spoof an attendee. Furthermore, iCalendar text generated by Outlook can be modified outside of Outlook.

On import, Outlook performs some automatic processing of iTIP messages, so a spoofed attendee can cause limited modifications to the organizer's copy of the meeting without user interaction.

### 2.2.155 [RFC5546] Section 6.1.3 Unauthorized Replacement of the Organizer

V0313:

The specification states that when a new organizer sends out an updated VEVENT or VTODO, the attendee's calendar user agent will detect that the organizer has changed, but it has no way of knowing whether or not the change was mutually agreed upon.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

When an attendee forwards a meeting request to another calendar user via SMTP, the **ORGANIZER** property is changed to the forwarding attendee.

Outlook can import REQUEST-type iCalendar objects that update the **ORGANIZER** property.

### 2.2.156 [RFC5546] Section 6.1.4 Eavesdropping and Data Integrity

V0314:

The specification states that an iCalendar object is constructed with human-readable clear text. Any information contained in an iCalendar object may be read and/or changed by unauthorized persons while the object is in transit.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports iCalendar data in clear text. The user can save a meeting to an .ics file and attach it to an encrypted e-mail to mitigate this.

Outlook can receive digitally-signed or encrypted **MIME** data, which can contain an .ics attachment.

### 2.2.157 [RFC5546] Section 6.1.5 Flooding a Calendar

V0315:

The specification states that implementations MAY provide a means to automatically incorporate REQUEST methods into a calendar. This presents the opportunity for a calendar to be flooded with requests, which effectively block all the calendar's free time.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not limit the number of requests that a user can send.

On import, Outlook does automatically incorporate REQUEST methods into the calendar. However, until the user responds to the request, the meeting is rendered in a tentative state.

### 2.2.158 [RFC5546] Section 6.1.6 Unauthorized Refresh Requests

V0316:

The specification states that it is possible for an organizer to receive a REFRESH request from someone who is not an attendee of an event or to-do. Only attendees of an event are authorized to receive replies to REFRESH requests. Replying to such requests to anyone who is not an attendee may be a security problem.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export iCalendar objects with a **METHOD** of "REFRESH".

On import, Outlook does not implement the REFRESH method and treats all such requests as PUBLISH.

### 2.2.159 [RFC5546] Section 6.2 Recommendations

V0317:

The specification states that for an application where the information is sensitive or critical and the network is subject to a high probability of attack, iTIP transactions SHOULD be encrypted. This may be accomplished using public key technology, specifically Security Multiparts for MIME [RFC1847] in the iTIP transport binding.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports iCalendar data in clear text. The user can, however, save a meeting as an .ics file and attach it to an SMIME email.

On import, Outlook can receive digitally signed or encrypted SMIME data, which can contain an .ics attachment.

## 2.2.160    [RFC5546] Section 6.2.1 Securing iTIP Transactions

V0318:

The specification states that iTIP transport bindings MUST provide a mechanism based on Security Multiparts for MIME [RFC1847] to enable authentication of the sender's identity, and privacy and integrity of the data being transmitted.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does allow users to send SMIME email. However, to export iCalendar data securely via SMIME, the user must first save the meeting to an .ics file, then attach it to an SMIME email.

On import, Outlook can receive digitally signed or encrypted SMIME data, which can contain an .ics attachment.

V0319:

The specification states that implementations MAY provide controls for users to disable the capability to uses SMIME for authentication and data integrity.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

By default, all mail sent from Outlook is unsigned and unencrypted. Outlook has no options to disable receipt of SMIME e-mail.

## 2.2.161    [RFC5546] Section 6.2.2 Implementation Controls

V0320:

The specification states that the threat of unauthorized replacement of the organizer SHOULD be mitigated by a calendar system that uses this protocol by providing controls or alerts that make calendar users aware of such organizer changes and allowing them to decide whether or not the request should be honored.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Upon receipt of a REQUEST-type iCalendar object, Outlook incorporates the meeting update into the user's copy of the meeting automatically.

V0321:

The specification states that the threat of flooding a calendar SHOULD be mitigated by a calendar system that uses this protocol by providing controls that may be used to limit the acceptable sources for iTIP transactions, and perhaps the size of messages and volume of traffic, by source.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook provides a configurable junk mail filter which can filter suspicious mail. iTIP messages classified as junk mail are not processed and are not added to the user's calendar.

V0322:

The specification states that the threat of malicious procedural alarms SHOULD be mitigated by a calendar system that uses this protocol by providing controls that may be used to disallow procedural alarms in iTIP transactions and/or remove all alarms from the object before delivery to the recipient.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook ignores the **ACTION** property on import and treats all VALARM components as reminders [MS-OXORMDR].

V0323:

The specification states that the threat of unauthorized REFRESH requests SHOULD be mitigated by a calendar system that uses this protocol by providing controls or alerts that allow the calendar user to decide whether or not the request should be honored.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not implement the REFRESH method, and treats all such iCalendar data as PUBLISH.

V0324:

The specification states that an implementation MAY decide to maintain, for audit or historical purposes, calendar users who were part of an attendee list and who were subsequently uninvited.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not maintain a list of uninvited attendees.

## 2.2.162        [RFC6047] Section 1.1 Related Memos

C0030:

The specification describes how iMIP relates to iCal [RFC5545] and iTIP [RFC5546].

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

iTIP is interpreted as being the use of iCalendar format to represent scheduling objects. iMIP is interpreted as a subset of iTIP, specifically a method for transmitting iTIP data over e-mail without any embedding. In particular, iCalendar files attached to an e-mail message is not considered in the scope of the iMIP protocol.

In some places, [RFC6047] does not imply that there is a difference between iMIP data and iCalendar files attached to an e-mail message. Outlook renders these two scenarios differently, as detailed in the following sections.

## 2.2.163        [RFC6047] Section 2.1 MIME Media Type

V0325:

The specification states that a **MIME entity** containing content information formatted according to [RFC6047] is referenced as a "text/calendar" content type.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook exports iMIP data in MIME parts with a Content-Type of "text/calendar". .ics files attached to e-mail messages have a Content-Type of "application/octet-stream".

On import, MIME parts that contain iMIP data MUST have a Content-Type header of "text/calendar" in order for Outlook to treat them as iMIP data.

## 2.2.164        [RFC6047] Section 2.2.1 Authorization

V0326:

The specification states that implementations of iMIP SHOULD verify the authenticity of an iCalendar object before taking any action.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook processes iMIP messages automatically upon receipt, without verification.

V0327:

The specification states it is left to implementations to provide mechanisms for the calendar users to decide if a calendar user has authorized someone to work on their behalf.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook processes iMIP messages automatically upon receipt, without user interaction.

## 2.2.165 [RFC6047] Section 2.2.2 Authentication

V0328:

The specification states that authentication can be performed using an implementation of [RFC1847] "multipart/signed" that supports public/private key certificates.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook provides no mechanism to sign or encrypt iMIP data. Outlook can attach .ics files to signed or encrypted e-mail.

On import, Outlook fails to render signed or encrypted iMIP data. Outlook can correctly render .ics files attached to signed or encrypted e-mail.

## 2.2.166 [RFC6047] Section 2.2.3 Confidentiality

V0329:

The specification states that to ensure confidentiality using iMIP, implementations SHOULD utilize encryption specified in S/MIME, as specified in [RFC5750] and [RFC5751].

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook provides no mechanism to sign or encrypt iMIP data. Outlook can attach .ics files to signed or encrypted e-mail.

On import, Outlook fails to render signed or encrypted iMIP data. Outlook can correctly render .ics files attached to signed or encrypted e-mail.

V0330:

The specification states that the protocol does not restrict a calendar user agent from forwarding iCalendar objects to other users or agents.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook allows calendar users to forward iMIP data to other calendar users. Outlook can import and render iMIP data that has been forwarded from another calendar user.

## 2.2.167 [RFC6047] Section 2.3 Email Addresses

V0331:

The specification states that the calendar address specified within the **ORGANIZER** and **ATTENDEE** properties in an iCalendar object MUST be a proper mailto: URI specification for the corresponding organizer or attendee.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook imports **ATTENDEE** properties with invalid calendar addresses as attendees with no e-mail address. See section 2.1.23 for export behavior.

## 2.2.168 [RFC6047] Section 2.4 Content-Type Header Field

V0332:

The specification states that a MIME body part containing content information that conforms to [RFC6047] MUST have an "Content-Type" value of "text/calendar", as specified in [RFC2045].

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On export, Outlook exports iMIP data in MIME parts with a Content-Type of "text/calendar". .ics files attached to e-mail messages have a Content-Type of "application/octet-stream".

On import, MIME parts that contain iMIP data MUST have a Content-Type header of "text/calendar" in order for Outlook to treat them as iMIP data.

V0333:

The specification states that the "Content-Type" header field, as specified in [RFC2045], must also include the type parameter "method", and the value MUST be the same as the value of the **METHOD** calendar property within the iCalendar object.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

On import, if the value of the method parameter of the Content-Type header does not match the value of the **METHOD** property in the iCalendar object, the value of the **METHOD** property in the iCalendar object is used.

V0334:

The specification states that a MIME message containing multiple iCalendar objects with different method values must be further encapsulated with a "multipart/mixed" MIME entity.

Office Outlook 2007

Office Outlook 2007 does not export multiple iCalendar objects as iMIP data in one MIME message. In "multipart/mixed" MIME messages, Outlook only exports iMIP data as the first child of the "multipart/mixed" MIME part (or a descendant of that first child). iCalendar data located elsewhere in a "multipart/mixed" MIME message is intended to be an .ics attachment.

On import, Office Outlook 2007 only searches the first child (and its descendants) of a "multipart/mixed" MIME part for iMIP data. Any iCalendar data found elsewhere in a "multipart/mixed" MIME message is treated as an attachment.

Outlook 2010, Outlook 2013, Outlook 2016

Outlook 2010, Outlook 2013, and Outlook 2016 behave identically to Office Outlook 2007, with the following exception:

Outlook 2010, Outlook 2013, and Outlook 2016 search in all children of a "multipart/mixed" MIME part for iMIP data. If multiple children contain iMIP data, all but the first are treated as attachments.

V0335:

The specification states that a "charset" parameter MUST be present if the iCalendar object contains characters that are not part of the US-ASCII character set.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports the "charset" parameter of the Content-Type header as "utf-8". On import, Outlook ignores the "charset" parameter on the Content-Type header and always imports iMIP data as UTF-8.

V0336:

The specification states that the optional "component" parameter defines the iCalendar component type contained within the iCalendar object.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export the "component" parameter of the Content-Type header, and ignores it on import.

V0337:

The specification states that in order to permit the information in the scheduling message to be understood by MIME user agents that do not support the "text/calendar" content type, scheduling messages SHOULD be sent with an alternative, human-readable form of the information.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

If the meeting has an attachment, Outlook exports the iMIP data as a child in a "multipart/alternative" MIME part that also contains a plain-text representation of the data.

On import, Outlook uses the first "text/html" child of a "multipart/alternative" parent to replace the **DESCRIPTION** property of the iMIP data.

## 2.2.169    [RFC6047] Section 2.5 Content-Transfer-Encoding Header Field

V0338:

The specification states that a transfer encoding SHOULD be used for iCalendar objects containing any characters that are not part of the US-ASCII character set.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook exports iMIP data with a Content-Transfer-Encoding value of "7bit" if the text is comprised solely of US-ASCII characters, and "8bit" otherwise.

On import, Outlook ignores the Content-Transfer-Encoding header and always imports iMIP data as UTF-8.

## 2.2.170    [RFC6047] Section 2.6 Content-Disposition Header Field

V0339:

The specification states that implementations may wish to include a **"Content-Disposition"** property to define a file name.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export a **Content-Disposition** property on iMIP data.

On import, if the **Content-Disposition** property is set to "attachment" (case-insensitive) on iMIP data, Outlook treats it as an attachment and does not process it as iMIP data.

## 2.2.171    [RFC6047] Section 3 Security Considerations

V0340:

The specification states that implementations MAY provide a means for users to disable signing and encrypting.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook by default sends email without signing or encrypting, and cannot sign or encrypt iMIP messages. Outlook has no means to disable receipt of signed or encrypted messages.

### 2.2.172 [RFC6047] Section 4.1 Single Component with an ATTACH Property

C0031:

The specification provides a sample message to show how an iCalendar object references an attachment.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

It is assumed this section is about iMIP messages with the following MIME structure:

- text/calendar

Outlook can import and export iMIP messages with this MIME structure.

### 2.2.173 [RFC6047] Section 4.2 Using multipart/alternative for Low-Fidelity Clients

C0032:

The specification provides a sample message to show how a client can emit a multipart message that includes both a plain text version as well as the full iCalendar object.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

It is assumed this section is about iMIP messages with the following structure:

- multipart/alternative

- text/calendar

Outlook does not export messages with this MIME structure. Outlook can import messages with this MIME structure.

### 2.2.174 [RFC6047] Section 4.3 Single Component With An ATTACH Property and Inline Attachment

C0033:

The specification provides a sample message to show how a message containing an iCalendar object references an attached document.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

It is assumed this section is about iMIP messages with the following structure:

- multipart/related

- text/calendar

- Attachment MIME part

Outlook does not export iMIP data with this MIME structure. Outlook can import messages with this MIME structure. However, since the text/calendar part has a Content-Disposition of "attachment", the part is treated as an attachment and is not treated as an iMIP message.

## 2.2.175      [RFC6047] Section 4.4 Multiple Similar Components

C0034:

The specification provides a sample message to show how multiple iCalendar components of the same type can be included in the iCalendar object when the **METHOD** is the same for each component.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

It is assumed this section is about iMIP messages with the following structure:

text/calendar (with multiple VEVENT components)

Outlook does not export multiple VEVENT components in an iMIP message, and does not export the PUBLISH method in iMIP messages.

On import, all but the first VEVENT are ignored. Furthermore, Outlook does not recognize PUBLISH as an iMIP method or "attachment" as a valid iMIP Content-Disposition. This MIME part would be imported as an attachment.

## 2.2.176      [RFC6047] Section 4.5 Multiple Mixed Components

C0035:

The specification provides a sample message to show how different component types must be encapsulated in separate iCalendar objects.

Office Outlook 2007

It is assumed this section is about iMIP messages with the following structure:

- multipart/mixed

- text/calendar

- text/calendar

Office Outlook 2007 does not export multiple iMIP parts in the same MIME message.

On import, Office Outlook 2007 only searches for iMIP parts in the first child (and its descendants) of a multipart/mixed MIME part. The second text/calendar part of this message would be treated as an attachment. Furthermore, since Content-Disposition is set to "attachment" on the first text/calendar part, it is also treated as an attachment.

Outlook 2010, Outlook 2013, Outlook 2016

Outlook 2010, Outlook 2013, and Outlook 2016 behave identically to Office Outlook 2007, with the following exception:

Outlook 2010, Outlook 2013, and Outlook 2016 search in all children of a "multipart/mixed" MIME part for iMIP data. If multiple children contain iMIP data, all but the first are treated as attachments. However, since Content-Disposition is set to "attachment" on the first text/calendar part, it is also treated as an attachment.

### 2.2.177 [RFC6047] Section 4.6 Detailed Components with an ATTACH Property

C0036:

The specification provides a sample message that shows the format of a message using multipart/related encapsulation to contain an iCalendar object that contains an **ATTACH** property with a CID reference.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

It is assumed this section is about iMIP messages with the following structure:

- multipart/related

- multipart/alternative

- text/plain

- text/calendar

- Attachment MIME part

Outlook exports iMIP data with attachments using the following MIME structure:

- multipart/mixed

- multipart/alternative

- text/plain

- text/html

- text/calendar

- Attachment MIME part

Outlook can import iMIP messages with the MIME structure shown by the sample. However, since the text/calendar part has a Content-Disposition of "attachment", the part is treated as an attachment and is not treated as an iMIP message.

### 2.2.178 [RFC6047] Section 5.1 Use of Content and Message IDs

V0341:

The specification states that it is strongly recommended that iMIP implementations include all referenced messages and body parts in a single MIME entity.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016

Outlook does not export MID URIs. Outlook only exports CID URIs for attachments that are included in the same MIME message as the iCalendar object.

On import, Outlook ignores all MID and CID URIs. Attachments in the same MIME message as an iMIP message are attached to the resulting meeting request, response, cancellation, or counter-proposal.

### 2.3 Error Handling

Unless otherwise specified above, Outlook handles errors according to the following:

Invalid property and parameter values are ignored.

Invalid components are ignored.

Invalid iCalendar objects are not imported.

## 2.4 Security

There are no additional security considerations beyond what are discussed in section 2.2.7, section 2.2.160, section 2.2.161, section 2.2.162, and section 2.2.172.

# 3 Change Tracking

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

# 4 Index