# [MS-STANOIMAP]:

# **Outlook Internet Message Access Protocol (IMAP) Standards Support**

This document provides a statement of standards support. It is intended for use in conjunction with the Microsoft technical specifications, publicly available standards specifications, network programming art, and Microsoft distributed systems concepts. It assumes that the reader is either familiar with the aforementioned material or has immediate access to it.

A Standards Support document does not require the use of Microsoft programming tools or programming environments in order to implement the standard. Developers who have access to Microsoft programming tools and environments are free to take advantage of them.

#### **Intellectual Property Rights Notice for Open Specifications Documentation**

- Technical Documentation. Microsoft publishes Open Specifications documentation ("this documentation") for protocols, file formats, data portability, computer languages, and standards support. Additionally, overview documents cover inter-protocol relationships and interactions.
- Copyrights. This documentation is covered by Microsoft copyrights. Regardless of any other terms that are contained in the terms of use for the Microsoft website that hosts this documentation, you can make copies of it in order to develop implementations of the technologies that are described in this documentation and can distribute portions of it in your implementations that use these technologies or in your documentation as necessary to properly document the implementation. You can also distribute in your implementation, with or without modification, any schemas, IDLs, or code samples that are included in the Open Specifications documentation.
- **No Trade Secrets**. Microsoft does not claim any trade secret rights in this documentation.
- Patents. Microsoft has patents that might cover your implementations of the technologies described in the Open Specifications documentation. Neither this notice nor Microsoft's delivery of this documentation grants any licenses under those patents or any other Microsoft patents. However, a given Open Specifications document might be covered by the Microsoft <u>Open</u> <u>Specifications Promise</u> or the <u>Microsoft Community Promise</u>. If you would prefer a written license, or if the technologies described in this documentation are not covered by the Open Specifications Promise or Community Promise, as applicable, patent licenses are available by contacting iplq@microsoft.com.
- License Programs. To see all of the protocols in scope under a specific license program and the associated patents, visit the <u>Patent Map</u>.
- Trademarks. The names of companies and products contained in this documentation might be covered by trademarks or similar intellectual property rights. This notice does not grant any licenses under those rights. For a list of Microsoft trademarks, visit www.microsoft.com/trademarks.
- Fictitious Names. The example companies, organizations, products, domain names, email addresses, logos, people, places, and events that are depicted in this documentation are fictitious. No association with any real company, organization, product, domain name, email address, logo, person, place, or event is intended or should be inferred.

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

**Tools**. The Open Specifications documentation does not require the use of Microsoft programming tools or programming environments in order for you to develop an implementation. If you have access to Microsoft programming tools and environments, you are free to take advantage of them. Certain Open Specifications documents are intended for use in conjunction with publicly available standards

specifications and network programming art and, as such, assume that the reader either is familiar with the aforementioned material or has immediate access to it.

**Support.** For questions and support, please contact <u>dochelp@microsoft.com</u>.

This document describes the choices made when implementing the 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	3.1.0	Minor	Updated the technical content.
2/10/2010	3.2.0	Minor	Updated the technical content.
8/4/2010	3.3	Minor	Clarified the meaning of the technical content.
11/3/2010	3.4	Minor	Clarified the meaning of the technical content.
3/18/2011	3.5	Minor	Clarified the meaning of the technical content.
8/5/2011	3.5	None	No changes to the meaning, language, or formatting of the technical content.
10/7/2011	3.5	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	5.0	None	No changes to the meaning, language, or formatting of the technical content.
7/26/2013	5.0	None	No changes to the meaning, language, or formatting of the technical content.
11/18/2013	5.0	None	No changes to the meaning, language, or formatting of the technical content.
2/10/2014	5.0	None	No changes to the meaning, language, or formatting of the technical content.
4/30/2014	5.0	None	No changes to the meaning, language, or formatting of the technical content.
7/31/2014	5.0	None	No changes to the meaning, language, or formatting of the technical content.
10/30/2014	5.0	None	No changes to the meaning, language, or formatting of the technical content.
5/26/2015	6.0	Major	Significantly changed the technical content.
9/14/2015	6.0	None	No changes to the meaning, language, or formatting of the technical content.

Date	Revision History	Revision Class	Comments
6/13/2016	6.0	None	No changes to the meaning, language, or formatting of the technical content.
9/14/2016	6.0	None	No changes to the meaning, language, or formatting of the technical content.
2/24/2017	6.0	None	No changes to the meaning, language, or formatting of the technical content.
4/27/2018	7.0	Major	Significantly changed the technical content.
8/28/2018	8.0	Major	Significantly changed the technical content.
6/18/2019	8.0	None	No changes to the meaning, language, or formatting of the technical content.
4/22/2021	9.0	Major	Significantly changed the technical content.
8/17/2021	10.0	Major	Significantly changed the technical content.
7/17/2024	11.0	Major	Significantly changed the technical content.

# **Table of Contents**

1	Intro	duction7
	1.1	Glossary7
	1.2	References
	1.2.1	
	1.2.2	
	1.3	Microsoft Implementations
	1.4	Standards Support Requirements
	1.5	Notation
2	Stand	dards Support Statements
	2.1	Normative Variations
	2.1.1	
	2.1.2	[RFC3501] Section 3.4, Client MUST Read the OK Response Before Closing the
		Connection
	2.1.3	
	2.1.4	[]
	2.1.5	
	2.1.6	L ] , J
	2.1.7	
		TLS_RSA_WITH_RC4_128_MD5 Cipher Suite11
	2.2	Clarifications
	2.2.1	
	2.2.2	
	2.2.3	L ], J
	2.2.4	
	2.2.5 2.2.6	, , , , , , , , , , , , , , , , , , , ,
	2.2.0	
	2.2.7	
	2.2.9	
	2.2.1	
	2.2.1	
	2.2.1	
	2.2.1	
	2.2.1	
	2.2.1	5 [RFC3501] Section 5.1.2, Mailbox Namespace Naming Convention
	2.2.1	
	2.2.1	
	2.2.1	
	2.2.1	
	2.2.2	
	2.2.2	
	2.2.2	
	2.2.2	
	2.2.2	
	2.2.2	
	2.2.2 2.2.2	
	2.2.2	
	2.2.2	
	2.2.2	
	2.2.3	
	2.2.3	
	2.2.3	
	2.2.3	

2.2.35	[RFC3501] Section 6.4.6, STORE Command	
2.2.36	[RFC3501] Section 6.4.7, COPY Command	27
2.2.37	[RFC3501] Section 6.4.8, UID Command	
2.2.38	[RFC3501] Section 6.5, Client Commands — Experimental/Expansion	
2.2.39	[RFC3501] Section 7, Server Responses	
2.2.40	[RFC3501] Section 7.1, Server Responses — Status Responses	
2.2.41	[RFC3501] Section 7.1.1, OK Response	
2.2.42	[RFC3501] Section 7.1.5, BYE Response	
2.2.43	[RFC3501] Section 7.2.1, CAPABILITY Response	
2.2.44	[RFC3501] Section 7.2.2, LIST Response	
2.2.45	[RFC3501] Section 7.2.5, SEARCH Response	
2.2.46	[RFC3501] Section 7.2.6, FLAGS Response	
2.2.47	[RFC3501] Section 7.3.2, RECENT Response	
2.2.48	[RFC3501] Section 7.4.2, FETCH Response	
2.2.49	[RFC3501] Section 11.1, STARTTLS Security Considerations	
2.2.50	[RFC2822] Section 3.6, Field Definitions	
2.2.51	[RFC2822] Section 3.6.8, Optional Fields	
2.3 Ei	ror Handling	32
2.4 S	ecurity	32
3 Change	e Tracking	33
4 Index.		35

# **1** Introduction

This document specifies the level of support provided by Outlook for the Internet Message Access Protocol (IMAP). A client that implements IMAP accesses and manipulates electronic **mailboxes** on an IMAP server in a way that is functionally equivalent to local folders. The Outlook IMAP service component sends IMAP requests to an IMAP 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].
- **mailbox**: A message store that contains email, calendar items, and other Message objects for a single recipient.
- **SASL**: The Simple Authentication and Security Layer, as described in [RFC2222]. This is an authentication mechanism used by the Lightweight Directory Access Protocol (LDAP).
- **Transmission Control Protocol (TCP)**: A protocol used with the Internet Protocol (IP) to send data in the form of message units between computers over the Internet. TCP handles keeping track of the individual units of data (called packets) that a message is divided into for efficient routing through the Internet.
- **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 <u>Errata</u>.

## **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 <u>dochelp@microsoft.com</u>. We will assist you in finding the relevant information.

[RFC2060] Crispin, M., "INTERNET MESSAGE ACCESS PROTOCOL - VERSION 4rev1", RFC 2060, December 1996, <u>http://www.rfc-editor.org/rfc/rfc2060.txt</u>

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

[RFC2246] Dierks, T., and Allen, C., "The TLS Protocol Version 1.0", RFC 2246, January 1999, https://www.rfc-editor.org/info/rfc2246 [RFC2822] Resnick, P., Ed., "Internet Message Format", RFC 2822, April 2001, <u>https://www.rfc-editor.org/info/rfc2822</u>

[RFC3501] Crispin, M., "INTERNET MESSAGE ACCESS PROTOCOL - VERSION 4rev1", RFC 3501, March 2003, <u>http://www.rfc-editor.org/rfc/rfc3501.txt</u>

[RFC6154] Leiba, B., and Nicolson, J., "IMAP LIST Extension for Special-Use Mailboxes", RFC 6154, March 2011, <u>http://www.rfc-editor.org/rfc/rfc6154.txt</u>

#### 1.2.2 Informative References

None.

#### **1.3 Microsoft Implementations**

- Microsoft Office Outlook 2007
- Microsoft Outlook 2010
- Microsoft Outlook 2013
- Microsoft Outlook 2016
- Microsoft Outlook 2019
- Microsoft Outlook 2021
- Microsoft Outlook 2024 Preview
- Microsoft Outlook for Windows (new)

#### 1.4 Standards Support Requirements

The conformance requirements for [RFC3501] are as follows:

- All required portions of the specification are implemented according to the specification.
- Any recommended portions that are implemented are implemented according to the specification.
- Any optional portions that are implemented are implemented according to the specification.

The following table lists the sections of [RFC3501] that are considered normative and the sections that are considered informative.

Section(s)	Normative/Informative
1	Informative
2 - 7	Normative
8	Informative
9	Normative
10 - 12	Informative

# 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 imp statements, omitted information, discrepancies, and errata. This does not include data 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) can impair interoperability, this profile identifies such points in the target specification.	

# 2 Standards Support Statements

# 2.1 Normative Variations

The following sub-sections detail the normative variations from [RFC3501].

# 2.1.1 [RFC3501] Section 2.1, Port 143

The specification states: "When TCP is used, an IMAP4rev1 server listens on port 143."

Outlook uses port 143 for non-SSL connections and port 993 for SSL connections. However, Outlook can be configured to use any port number.

# 2.1.2 [RFC3501] Section 3.4, Client MUST Read the OK Response Before Closing the Connection

The specification states that the client MUST read the tagged OK response to the LOGOUT command before the client closes the connection.

Outlook can be configured to send a LOGOUT command that immediately terminates the connection.

# 2.1.3 [RFC3501] Section 9, ABNF Rules in General

The specification states that **ABNF** rules MUST be strictly followed.

Outlook strictly follows the rules when sending requests or data to the server, but is more forgiving when parsing responses from the server.

# 2.1.4 [RFC3501] Section 9, Rule Regarding Spaces

The specification states: "In all cases, SP refers to exactly one space. It is NOT permitted to substitute TAB, insert additional spaces, or otherwise treat SP as being equivalent to LWSP."

Outlook strictly follows this rule when sending requests or data to the server, but is more forgiving when parsing responses from the server.

## 2.1.5 [RFC3501] Section 9, Body-extension Field

The specification states that, for future expansion, a client MUST accept body-extension fields.

Microsoft Office Outlook 2007, Microsoft Outlook 2010, Microsoft Outlook 2013, Microsoft Outlook 2016, Microsoft Outlook 2019, Microsoft Outlook 2021, Microsoft Outlook 2024 Preview

Outlook does not accept body-extension fields.

## 2.1.6 [RFC3501] Section 9, Flag-extension Field

The specification states that, for future expansion, a client MUST accept flag-extension fields.

Outlook ignores flag-extension fields.

#### 2.1.7 [RFC3501] Section 11.1, Client MUST Implement the TLS\_RSA\_WITH\_RC4\_128\_MD5 Cipher Suite

The specification states that the client MUST implement the TLS\_RSA\_WITH\_RC4\_128\_MD5 cipher suite.

Outlook does not implement the TLS\_RSA\_WITH\_RC4\_128\_MD5 cipher suite and, instead, relies on the operating system to provide the implementation.

# 2.2 Clarifications

The following sub-sections identify clarifications relative to [RFC3501] or [RFC2822].

Unless otherwise stated, the specified products conform to all SHOULD and RECOMMENDED behavior in [RFC3501] and [RFC2822]. The term "can" is used throughout [RFC3501] and [RFC2822] and is interpreted to indicate optional behavior.

## 2.2.1 [RFC3501] Section 2.2.1, Client Protocol Sender and Server Protocol Receiver

C0001:

The specification states that each client command is prefixed with an identifier, called a tag, but does not make a specific requirement on format. Later in the specification (section 9), the syntax is explicitly stated.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook randomly generates a sequence of four characters of lowercase letters "a" through "z", and/or digits 0 through 9.

Microsoft Outlook for Windows (new)

Outlook uses a tag with a prefix "WIR" followed by a 5-digit number beginning with "00001" and incrementing by one for each subsequent tag.

## 2.2.2 [RFC3501] Section 2.2.2, Server Protocol Sender and Client Protocol Receiver

V0001:

The specification states: "Server data MAY be sent as a result of a client command, or MAY be sent unilaterally by the server. There is no syntactic difference between server data that resulted from a specific command and server data that were sent unilaterally."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook can handle unrequested responses.

C0002:

The specification states: "Server data SHOULD be recorded, so that the client can reference its recorded copy rather than sending a command to the server to request the data. In the case of certain server data, the data MUST be recorded."

This part of the specification does not state which server data MUST be recorded. A thorough reading of the specification reveals that the client MUST record the following server data:

Mailbox size updates (section 5.2 of the specification)

- Updates from the FLAGS response (section 7.2.6 of the specification)
- Updates from the EXISTS response (section 7.3.1 of the specification)
- Updates from the RECENT response (section 7.3.2 of the specification)
- Updates from the EXPUNGE response (section 7.4.1 of the specification)

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Required recording of certain server data: Outlook records only three of the five server data that are required to be recorded. The following are not recorded:

- Updates from the FLAGS response Outlook ignores the FLAGS response, as specified in section 2.2.46 of this document.
- Updates from the RECENT response Outlook ignores the RECENT response, as specified in section <u>2.2.47</u> of this document.

Recommended recording of other server data: Outlook maintains a local cache of all user data and some meta-data (UIDs, hierarchy characters, etc.), thereby reducing the likelihood of the same data being repeatedly fetched from the server.

Outlook for Windows (new)

Outlook ignores unsolicited updates from the server.

# 2.2.3 [RFC3501] Section 2.3, Message Attributes

C0003:

The specification states: "In addition to message text, each message has several attributes associated with it." It is unclear whether "each message has several attributes associated with it" is a normative requirement.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook does not use some of the message attributes. For more details, see sections 2.2.4 through 2.2.9.

## 2.2.4 [RFC3501] Section 2.3.1.1, Unique Identifier (UID) Message Attribute

V0002:

The specification describes a next unique identifier.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook does not use the next unique identifier for any purpose.

Outlook for Windows (new)

Outlook uses UIDNEXT in conjunction with UIDVALIDITY and EXISTS to identify when and what type of incremental change has occurred.

V0003:

The specification states that unique identifiers SHOULD persist at all times.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

If a unique identifier does not persist, then Outlook fully resynchronizes the contents of each folder upon each visit in which the unique identifier was not persisted.

#### 2.2.5 [RFC3501] Section 2.3.2, Flags Message Attribute

V0004:

The specification defines the \Recent flag.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook ignores the \Recent flag.

V0005:

The specification states: "Servers MAY permit the client to define new keywords in the mailbox."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook does not define new keywords under any circumstances.

Outlook for Windows (new)

Outlook respects the "\$Forwarded" flag convention and MAY apply such a flag if the server indicates support for it.

#### 2.2.6 [RFC3501] Section 2.3.3, Internal Date Message Attribute

V0006:

The specification states that, in the case of messages delivered via SMTP, the value of the Internal Date message attribute SHOULD be the date and time of final delivery of the message as defined by SMTP.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook can be configured to use either the value of the Internal Date message attribute or the value of the message header as the date and time of final message delivery.

## 2.2.7 [RFC3501] Section 2.3.4, [RFC2822] Size Message Attribute

V0007:

The specification defines the [RFC2822] Size message attribute, which specifies the number of octets in the message.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook uses the [RFC2822] Size value only for message-size display purposes; Outlook does not use the [RFC2822] Size value for any logical processing.

# 2.2.8 [RFC3501] Section 2.3.5, Envelope Structure Message Attribute

V0008:

The specification defines the Envelope Structure message attribute.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook never requests the Envelope Structure message attribute.

# 2.2.9 [RFC3501] Section 2.3.6, Body Structure Message Attribute

V0009:

The specification defines the Body Structure message attribute.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook never requests the Body Structure message attribute.

Outlook for Windows (new)

Outlook MAY request the Body Structure message attribute.

# 2.2.10 [RFC3501] Section 2.4, Message Texts

V0010:

The specification states: "In addition to being able to fetch the full [RFC2822] text of a message, IMAP4rev1 permits the fetching of portions of the full message text."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook can fetch headers and bodies separately but cannot fetch individual body parts separately.

Outlook for Windows (new)

Outlook supports fetching body parts separately.

## 2.2.11 [RFC3501] Section 3.4, Logout State

V0011:

The specification states: "A client SHOULD NOT unilaterally close the connection, and instead SHOULD issue a LOGOUT command."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Under certain error conditions, Outlook drops the connection without sending a LOGOUT command.

# 2.2.12 [RFC3501] Section 4.3, String

V0012:

The specification states: "The empty string is represented as either "" (a quoted string with zero characters between double quotes) or as  $\{0\}$  followed by CRLF (a literal with an octet count of 0)."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook correctly generates and handles both representations.

#### 2.2.13 [RFC3501] Section 4.3.1, 8-bit and Binary Strings

V0013:

The specification states that implementations MAY transmit 8-bit or multi-octet characters in literals but SHOULD do so only when the IANA-registered character set is identified.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook does not transmit 8-bit or multi-octet characters.

V0014:

The specification states that implementations MUST encode binary data into a textual form, such as base64, before transmitting the data.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook uses **base64 encoding**.

V0015:

The specification states: "A string with an excessive amount of CTL characters MAY also be considered to be binary."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook does not modify the string based on number of CTL characters.

#### 2.2.14 [RFC3501] Section 5.1, Mailbox Naming

V0016:

The specification does not state a requirement for case sensitivity in non-INBOX **mailbox** names.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook allows folders to have names that differ only in case in the local IMAP store. Outlook functions correctly against a store that is case-insensitive.

Outlook for Windows (new)

Outlook tries to respect the folder naming rules of the IMAP's server.

V0017:

The specification states: "Any character which is one of the atom-specials (see the Formal Syntax) will require that the mailbox name be represented as a quoted string or literal."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook generates a quoted string, for a short name, and a literal, for a longer name, when encoding atom-specials. Outlook consumes both representations correctly.

V0018:

The specification states that CTL and other non-graphic characters are difficult to represent in a user interface and are best avoided.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook accepts only standard keyboard input.

V0019:

The specification states: "Although the list-wildcard characters ('%' and '\*') are valid in a mailbox name, it is difficult to use such mailbox names with the LIST and LSUB commands due to the conflict with wildcard interpretation."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook allows a folder name to contain the "%" and "\*" characters. If a server does not allow these characters, then Outlook handles error responses that result from the CREATE command and displays the error messages to the user.

V0020:

The specification states: "Usually, a character (determined by the server implementation) is reserved to delimit levels of hierarchy."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook does not allow a folder name to contain the hierarchy delimiter.

V0021:

The specification states: "Two characters, '#' and '&', have meanings by convention, and should be avoided except when used in that convention."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook allows a folder name to contain the "#" and "&" characters. The "&" character is encoded as "&-". For example, the folder name "a&b" is transmitted as "a&-b". A folder name that contains the "#" character is transmitted without any escaping.

#### 2.2.15 [RFC3501] Section 5.1.2, Mailbox Namespace Naming Convention

V0022:

The specification describes how the namespace identifier is used in the name of a **mailbox** namespace.

Outlook does not perform special handling of the namespace identifier. The "#" character can be used as part of the root-folder path in the Outlook configuration user interface (this allows a user to map multiple namespaces into the same Outlook profile). Outlook has no intrinsic knowledge of a namespace, and, therefore, treats a root-folder path that specifies a namespace the same as one that does not specify a namespace.

## 2.2.16 [RFC3501] Section 5.2, Mailbox Size and Message Status Updates

V0023:

The specification states: "At any time, a server can send data that the client did not request. Sometimes, such behavior is REQUIRED. For example, agents other than the server MAY add messages to the **mailbox**."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook handles unrequested data from the server and from agents other than the server.

#### 2.2.17 [RFC3501] Section 5.3, Response When No Command in Progress

V0024:

The specification states that server implementations are permitted to send an untagged response (except for EXPUNGE) while there is no command in progress.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook handles unilateral responses of all types.

## 2.2.18 [RFC3501] Section 5.4, Autologout Timer

V0025:

The specification describes an optional inactivity timer on the server.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook automatically generates NOOP commands in 10-minute (or less) intervals to avoid having its connections dropped due to inactivity.

#### 2.2.19 [RFC3501] Section 5.5, Multiple Commands in Progress

V0026:

The specification states: "The client MAY send another command without waiting for the completion result response of a command."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook is capable of sending another command without waiting for the completion-result response of the previous command.

Outlook for Windows (new)

Outlook will not send a command when there are commands awaiting a response.

# 2.2.20 [RFC3501] Section 6.1.1, CAPABILITY Command

V0027:

The specification describes the "AUTH=" capability name, which specifies an authentication mechanism that the server supports.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook recognizes "AUTH=NTLM" and "AUTH= DIGEST-MD5" in the CAPABILITY response.

Outlook for Windows (new)

Outlook recognizes LOGINDISABLED and AUTH= in the CAPABILITY response, as well as the following CAPABILITY responses added in IMAP extensions: SASL-IR, STARTTLS, ID, IDLE, CONDSTORE, ESEARCH, MOVE, UIDPLUS, ENABLE, MESSAGELIMIT=, APPENDLIMIT=, PARTIAL, and UIDONLY.

#### 2.2.21 [RFC3501] Section 6.1.2, NOOP Command

V0028:

The specification states that the NOOP command can be used as a periodic poll for new messages or message status updates during a period of inactivity and can also be used to reset any inactivity autologout timer on the server.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook uses the NOOP command as follows:

- If the server does not support the IDLE extension, then Outlook uses NOOP to poll.
- Regardless of whether the server supports the IDLE extension, then Outlook uses NOOP to reset the auto-logout timer.

Outlook for Windows (new)

Outlook does not use the NOOP command.

#### 2.2.22 [RFC3501] Section 6.2, Access Without Establishing Authentication

V0029:

The specification describes how the client can access certain **mailboxes** without establishing authentication.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook does not support the Anonymous **SASL** authenticator and does not have any method for logging on as "anonymous".

## 2.2.23 [RFC3501] Section 6.2.2, AUTHENTICATE Command

V0030:

The specification states: "If the server supports the requested authentication mechanism, it performs an authentication protocol exchange to authenticate and identify the client. It MAY also negotiate an OPTIONAL security layer for subsequent protocol interactions."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook does not perform out-of-band AUTHENTICATE negotiation.

E0001:

The specification states that the client is not required to implement any authentication mechanisms other than the PLAIN authentication mechanism.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

In addition to the PLAIN authentication mechanism, Outlook implements the following authentication mechanisms:

- NTLM
- DIGEST-MD5

Outlook for Windows (new)

Outlook supports XOAUTH2, NTLM, or PLAIN auth, or LOGIN as a fallback for PLAIN auth. It will use the auth mechanism that has been configured.

V0031:

The specification states: "A server implementation MUST implement a configuration in which it does NOT permit any plaintext password mechanisms, unless either the STARTTLS command has been negotiated or some other mechanism that protects the session from password snooping has been provided."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook does not require protection against password snooping.

E0002:

The specification states that the client SHOULD implement additional **SASL** mechanisms that do not use plaintext passwords.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

For more details, see E0001 in this section.

V0032:

The specification states: "The server SHOULD list its supported authentication mechanisms in the response to the CAPABILITY command so that the client knows which authentication mechanisms to use."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook uses only authentication mechanisms that are advertised by the server. If the server does not advertise any authentication mechanisms, then Outlook uses the LOGIN command.

#### V0033:

The specification states: "A server MAY include a CAPABILITY response code in the tagged OK response of a successful AUTHENTICATE command in order to send capabilities automatically. It is unnecessary for a client to send a separate CAPABILITY command if it recognizes these automatic capabilities."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook sends a CAPABILITY command regardless of whether it receives a CAPABILITY response code in response to a successful AUTHENTICATE command.

V0034:

The specification states: "If an AUTHENTICATE command fails with a NO response, the client MAY try another authentication mechanism by issuing another AUTHENTICATE command. It MAY also attempt to authenticate by using the LOGIN command. In other words, the client MAY request authentication types in decreasing order of preference, with the LOGIN command as a last resort."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Depending on user/administrator provided policies, Outlook successively tries decreasingly strong methods of authentication until it finds one that works. Outlook uses the LOGIN command to authenticate if it does not find an authentication method that works.

Outlook also uses the LOGIN command to authenticate when the server does not advertise any authentication mechanisms and when the LOGIN command is not disabled by a user/administrator policy.

#### 2.2.24 [RFC3501] Section 6.2.3, LOGIN Command

V0035:

The specification states: "A server MAY include a CAPABILITY response code in the tagged OK response to a successful LOGIN command in order to send capabilities automatically. It is unnecessary for a client to send a separate CAPABILITY command if it recognizes these automatic capabilities."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook sends a CAPABILITY command regardless of whether the server sends the capabilities automatically.

Outlook for Windows (new)

Outlook does not send a CAPABILITY command if capabilities they were received prior to authentication from the server's welcome message/greeting.

## 2.2.25 [RFC3501] Section 6.3.1, SELECT Command

V0036:

The specification states that the server MUST send the following untagged data to the client before returning a tagged OK for the SELECT command response: FLAGS, EXISTS, RECENT, UNSEEN, PERMANENTFLAGS, UIDNEXT, and UIDVALIDITY. The specification also states that the client implementation SHOULD have default behavior for handling a SELECT response that is missing the required untagged data.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook requires the EXISTS untagged data and the UIDVALIDITY untagged data for proper operation. Outlook is unaffected if any of the following untagged data are missing: FLAGS, RECENT, UNSEEN, PERMANENTFLAGS, or UIDNEXT.

Outlook for Windows (new)

Outlook requires the EXISTS, UIDNEXT, and UIDVALIDITY untagged data for proper operation.

Outlook is unaffected if any of the following untagged data are missing: FLAGS, RECENT, UNSEEN, or PERMANENTFLAGS.

#### V0037:

The specification notes the following consequences for the client when the SELECT command response is missing certain untagged data:

- UNSEEN If this data is missing, then the client cannot make any assumptions about the first unseen message in the **mailbox**, and needs to issue a SEARCH command if it wants to find it.
- PERMANENTFLAGS If this data is missing, then the client should assume that all flags can be changed permanently.
- UIDNEXT If this data is missing, then the client cannot make any assumptions about the next unique identifier value.
- UIDVALIDITY If this data is missing, then the server does not support unique identifiers.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook's behavior for each of these missing untagged data items is as follows:

- UNSEEN Outlook ignores this data and, therefore, takes no special action if it is missing.
- PERMANENTFLAGS Outlook always assumes that all flags can be changed permanently.
- UIDNEXT Outlook ignores this data and, therefore, takes no special action if it is missing.
- UIDVALIDITY Outlook does not function properly against a server that does not support unique identifiers.

#### V0038:

The specification states: "If the client is permitted to modify the mailbox, the server SHOULD prefix the text of the tagged OK response with the READ-WRITE response code."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021

Outlook ignores the READ-WRITE response code and, therefore, takes no special action if a folder is advertised as READ-WRITE.

#### V0039:

The specification states: "If the client is not permitted to modify the mailbox but is permitted read access, the mailbox is selected as read-only and the server MUST prefix the text of the tagged OK response to SELECT with the READ-ONLY response code."

Outlook ignores the READ-ONLY response code and, therefore, takes no special action if a folder is advertised as READ-ONLY.

# 2.2.26 [RFC3501] Section 6.3.2, EXAMINE Command

V0040:

The specification defines the EXAMINE command.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook does not use the EXAMINE command.

## 2.2.27 [RFC3501] Section 6.3.8, LIST Command

V0041:

The specification states that server implementations are permitted to hide otherwise accessible mailboxes from the wildcard characters.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

When Outlook is in "show all folders" mode, Outlook requires that the server expose the hidden folders for wildcards, thereby making the full hierarchy discoverable.

Outlook for Windows (new)

Outlook requires folders to be unhidden for wildcards.

V0042:

The specification states: "The special name INBOX is included in the output from LIST, if INBOX is supported by this server for this user and if the uppercase string 'INBOX' matches the interpreted reference and **mailbox** name arguments with wildcards. The criteria for omitting INBOX is whether SELECT INBOX will return failure."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook interoperates properly with a server that does not expose INBOX.

Outlook for Windows (new)

Outlook requires INBOX to be accessible.

# 2.2.28 [RFC3501] Section 6.3.9, LSUB Command

V0043:

The specification states: "The returned untagged LSUB response MAY contain different **mailbox** flags from a LIST untagged response. If this should happen, the flags in the untagged LIST are considered more authoritative."

Outlook uses the flags supplied with the most recent response to either LSUB or LIST. In other words, the authority is neither LSUB nor LIST, but the most recently received response to either of these two commands.

# 2.2.29 [RFC3501] Section 6.3.10, STATUS Command

V0044:

The specification states that clients SHOULD NOT expect to be able to issue many consecutive STATUS commands and obtain reasonable performance.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook can be configured to send a large number of these commands consecutively but does so on a background thread to avoid delaying user operations.

V0045:

The specification states that the following status data items can be requested: MESSAGES, RECENT, UIDNEXT, UIDVALIDITY, and UNSEEN.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021

Outlook requests only the UNSEEN status data item.

## 2.2.30 [RFC3501] Section 6.3.11, APPEND Command

V0046:

The specification states that the "message literal" argument SHOULD be in the format of an [RFC2822] message, but there MAY be exceptions, such as draft messages, in which the required [RFC2822] header lines are omitted from the message literal argument.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook is capable of uploading incomplete draft messages.

V0047:

The specification states: "Unless it is certain that the destination **mailbox** cannot be created, the server MUST send the response code TRYCREATE as the prefix of the text of the tagged NO response."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook ignores the TRYCREATE response code.

V0048:

The specification states: "If the mailbox is currently selected, the normal new message actions SHOULD occur. Specifically, the server SHOULD notify the client immediately via an untagged EXISTS response. If the server does not do so, the client MAY issue a NOOP command (or failing that, a CHECK command) after one or more APPEND commands."

The absence of an untagged EXISTS response does not determine whether Outlook sends a NOOP command after an APPEND command. In other words, any generation of a NOOP in this case is independent of the untagged EXISTS response. Outlook does not use the CHECK command.

# 2.2.31 [RFC3501] Section 6.4.1, CHECK Command

V0049:

The specification defines the CHECK command.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook does not use the CHECK command.

## 2.2.32 [RFC3501] Section 6.4.2, CLOSE Command

V0050:

The specification states: "Even if a **mailbox** is selected, a SELECT, EXAMINE, or LOGOUT command MAY be issued without previously issuing a CLOSE command."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook can issue a SELECT command or a LOGOUT command without previously issuing a CLOSE command. Outlook does not use the EXAMINE command.

# 2.2.33 [RFC3501] Section 6.4.4, SEARCH Command

V0051:

The specification defines the SEARCH command.

Office Outlook 2007, Outlook 2010

Outlook does not use the SEARCH command.

Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook uses the SEARCH command.

## 2.2.34 [RFC3501] Section 6.4.5, FETCH Command

V0052:

The specification states: "There are three macros which specify commonly-used sets of data items, and can be used instead of data items."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook does not use these macros.

V0053:

The specification defines BODY[<section>] <<pre>partial>> as one of the data items that can be fetched.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook does not issue a FETCH command with the BODY[<section>] <<partial>> data item. The data items that Outlook can fetch are specified in V0054 and V0055 in this section.

Outlook for Windows (new)

Outlook does not issue FETCH commands using BODY.

V0054:

The specification defines BODY.PEEK[<section>] <<pre>capartial>> as one of the data items that can be
fetched, where <section> is a set of zero or more part specifiers delimited by periods. The
specification defines a part specifier as either a part number or one of the following: HEADER,
HEADER.FIELDS, HEADER.FIELDS.NOT, MIME, and TEXT.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook uses either the HEADER part specifier or zero part specifiers; Outlook does not use a part number and does not use <partial>. Therefore, the BODY.PEEK data item has the following forms in an Outlook fetch:

- BODY.PEEK[]
- BODY.PEEK[HEADER]

Outlook for Windows (new)

Outlook uses HEADER, HEADER.FIELDS, section, or zero part specifiers with BODY.PEEK.

V0055:

The specification defines data items that can be fetched.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook issues a FETCH command with data items as follows. For more details about the BODY.PEEK data item, see V0054 in this section.

To all servers:

- (UID)
- (UID FLAGS)

Only to IMAP4 servers that do not send "IMAP4rev1" as a listed capability in a CAPABILITY response as specified in [RFC3501] section 6.1.1:

- (UID FLAGS RFC822.SIZE RFC822.HEADER INTERNALDATE)
- (UID FLAGS RFC822)
- (UID FLAGS RFC822.SIZE RFC822.HEADER)
- (UID FLAGS RFC822.PEEK)

**Note:** The RFC822.PEEK data item was obsoleted by [RFC2060]. However, Outlook still uses the RFC822.PEEK data item, as specified here.

Only to IMAP4 servers that send "IMAP4rev1" as a listed capability in a CAPABILITY response:

- (UID FLAGS RFC822.SIZE BODY.PEEK[HEADER] INTERNALDATE)
- (UID FLAGS BODY.PEEK[])
- (UID FLAGS RFC822.SIZE BODY.PEEK[HEADER])
- (UID FLAGS BODY.PEEK[])

Outlook for Windows (new)

Outlook will issue FETCH commands for several different types of data depending on what it needs, including the UID, FLAGS, RFC822.SIZE, INTERNALDATE, BODYSTRUCTURE, and various versions of BODY.PEEK.

# 2.2.35 [RFC3501] Section 6.4.6, STORE Command

V0056:

The specification defines data items that can be stored.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook can issue the STORE command with the data items as follows:

FLAGS (<flags>)

where <flags> can be any combination of the following: \Seen, \Draft, \Flagged, \Answered, \Deleted

- +FLAGS (\Deleted \Seen)
- -FLAGS (\Deleted)
- +FLAGS (\Seen)
- -FLAGS (\Seen)
- +FLAGS.SILENT (\Deleted)
- -FLAGS.SILENT (\Deleted)
- +FLAGS.SILENT (\Seen)
- -FLAGS.SILENT (\Seen)
- +FLAGS.SILENT (\Flagged)
- -FLAGS.SILENT (\Flagged)
- +FLAGS.SILENT (\Answered)
- -FLAGS.SILENT (\Answered)

Outlook for Windows (new)

Outlook can also handle the flag \$Forwarded.

# 2.2.36 [RFC3501] Section 6.4.7, COPY Command

V0057:

The specification states: "The flags and internal date of the message(s) SHOULD be preserved, and the \Recent flag SHOULD be set, in the copy."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook might display the wrong date on the target message if the server does not preserve the flags and internal date of the message(s). Outlook is unaffected by the setting of the  $\$ 

V0058:

The specification states: "Unless it is certain that the destination **mailbox** cannot be created, the server MUST send the response code TRYCREATE as the prefix of the text of the tagged NO response."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook ignores the TRYCREATE response code.

# 2.2.37 [RFC3501] Section 6.4.8, UID Command

V0059:

The specification states that the UID command takes the following commands as arguments: COPY, FETCH, STORE, or SEARCH.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021

Outlook can issue a UID COPY, UID FETCH, or UID STORE, but cannot issue a UID SEARCH.

V0060:

The specification states that, in regards to a UID COPY, UID FETCH, or UID STORE, the numbers in the sequence set argument are unique identifiers instead of message sequence numbers and sequence set ranges are permitted, but there is no guarantee that unique identifiers will be contiguous.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook can issue UID COPY, UID FETCH, or UID STORE with sequence set ranges.

## 2.2.38 [RFC3501] Section 6.5, Client Commands – Experimental/Expansion

V0061:

The specification describes how to define an experimental command or any command that is not part of the specification.

Office Outlook 2007, Outlook 2010

Outlook does not define any such commands.

Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook implements the IMAP LIST extension specified in [RFC6154] as the **XLIST** command.

# 2.2.39 [RFC3501] Section 7, Server Responses

#### C0004:

The specification states: "Certain server data MUST be recorded by the client when it is received;" and "Other server data SHOULD be recorded for later reference; if the client does not need to record the data, or if recording the data has no obvious purpose (e.g., a SEARCH response when no SEARCH command is in progress), the data SHOULD be ignored."

This part of the specification does not state which server data MUST be recorded. A thorough reading of the specification reveals that the client MUST record the following server data:

- Mailbox size updates (section 5.2 of the specification)
- Updates from the FLAGS response (section 7.2.6 of the specification)
- Updates from the EXISTS response (section 7.3.1of the specification)
- Updates from the RECENT response (section 7.3.2 of the specification)
- Updates from the EXPUNGE response (section 7.4.1 of the specification)

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

For details, see C0002 in section 2.2.2 of this document.

#### 2.2.40 [RFC3501] Section 7.1, Server Responses — Status Responses

V0062:

The specification states that status responses MAY include an OPTIONAL response code.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook processes the following response codes: ALERT, UIDVALIDITY, and UNSEEN. Outlook sometimes caches the UNSEEN response code and presents it to the user.

Outlook ignores the following response codes:

- BADCHARSET
- CAPABILITY
- PARSE
- PERMANENTFLAGS
- READ-ONLY
- READ-WRITE
- TRYCREATE
- UIDNEXT

Outlook for Windows (new)

Outlook does not display response texts.

# 2.2.41 [RFC3501] Section 7.1.1, OK Response

V0063:

The specification states that the human-readable text contained in the OK response MAY be presented to the user as an information message.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook presents the human readable text to the user only when an ALERT response code is also included in the OK response.

#### 2.2.42 [RFC3501] Section 7.1.5, BYE Response

V0064:

The specification states that the human-readable text contained in the BYE response MAY be presented to the user in a status report.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook never displays this human-readable text to the user.

## 2.2.43 [RFC3501] Section 7.2.1, CAPABILITY Response

V0065:

The specification states: "A server MAY send capabilities automatically, by using the CAPABILITY response code in the initial PREAUTH or OK responses, and by sending an updated CAPABILITY response code in the tagged OK response as part of a successful authentication. It is unnecessary for a client to send a separate CAPABILITY command if it recognizes these automatic capabilities."

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook parses the **CAPABILITY** response code but sends a separate **CAPABILITY** command to retrieve the capabilities and merges the results.

#### 2.2.44 [RFC3501] Section 7.2.2, LIST Response

V0066:

The specification defines four name attributes for the LIST response.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview

Outlook recognizes the Noinferiors and Noselect name attributes. Outlook ignores the Marked and Unmarked name attributes.

Outlook for Windows (new)

Outlook uses the \Noselect name attribute and special use flags defined in [RFC6154].

#### 2.2.45 [RFC3501] Section 7.2.5, SEARCH Response

V0067:

The specification describes the response to a **SEARCH** command.

Office Outlook 2007, Outlook 2010

Outlook does not use the **SEARCH** command and ignores all **SEARCH** responses.

Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook uses the **SEARCH** command and does not ignore the **SEARCH** response.

# 2.2.46 [RFC3501] Section 7.2.6, FLAGS Response

V0068:

The specification describes the FLAGS response, which occurs as a result of a SELECT or EXAMINE command.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021

Outlook ignores the FLAGS response.

## 2.2.47 [RFC3501] Section 7.3.2, RECENT Response

V0069:

The specification describes the RECENT response, which occurs as a result of a SELECT or EXAMINE command.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook ignores the RECENT response.

## 2.2.48 [RFC3501] Section 7.4.2, FETCH Response

V0070:

The specification describes the response to a FETCH request that specifies the BODY[<section>]<<pre>partial>> data item.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook never sends a FETCH request for a partial body of a message. If a FETCH response includes a partial body, then it is possible that Outlook will overwrite the full body with the partial body.

The FETCH requests that Outlook is capable of sending are specified in V0054 and V0055 in section 2.2.34 of this document.

V0071:

The specification describes the response to a FETCH request that specifies the BODYSTRUCTURE data item.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook never sends a FETCH request that specifies the BODYSTRUCTURE data item.

The FETCH requests that Outlook is capable of sending are specified in V0054 and V0055 in section 2.2.34 of this document.

V0072:

The specification describes the response to a FETCH request that specifies the ENVELOPE data item.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook never sends a FETCH request that specifies the ENVELOPE data item.

The FETCH requests that Outlook is capable of sending are specified in V0054 and V0055 in section 2.2.34 of this document.

# 2.2.49 [RFC3501] Section 11.1, STARTTLS Security Considerations

V0073:

The specification states that the client SHOULD implement the TLS\_DHE\_DSS\_WITH\_3DES\_EDE\_CBC\_SHA cipher suite, as specified in [RFC2246].

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

Outlook does not implement the TLS\_DHE\_DSS\_WITH\_3DES\_EDE\_CBC\_SHA cipher suite and, instead, relies on the operating system to provide the implementation.

V0074:

The specification states that all cipher suites other than TLS\_RSA\_WITH\_RC4\_128\_MD5 and TLS\_DHE\_DSS\_WITH\_3DES\_EDE\_CBC\_SHA are OPTIONAL.

Office Outlook 2007, Outlook 2010, Outlook 2013, Outlook 2016, Outlook 2019, Outlook 2021, Outlook 2024 Preview, Outlook for Windows (new)

Outlook does not implement any optional cipher suites and, instead, relies on the operating system to provide the implementation of any optional cipher suites.

# 2.2.50 [RFC2822] Section 3.6, Field Definitions

V0075:

The specification states that header fields SHOULD NOT be reordered when a message is transported or transformed.

Office Outlook 2007, Outlook 2010, Outlook 2013

Outlook can put the header fields in an arbitrary order when a message is transported or transformed.

V0076:

The specification states that trace header fields and resent header fields MUST NOT be reordered.

Office Outlook 2007, Outlook 2010, Outlook 2013

Outlook can put trace header fields and resent header fields in an arbitrary order.

# 2.2.51 [RFC2822] Section 3.6.8, Optional Fields

V0077:

The specification states "Fields may appear in messages that are otherwise unspecified in this standard" and further states that such fields are uninterpreted.

Office Outlook 2007, Outlook 2010, Outlook 2013

Outlook deletes fields that are unspecified.

# 2.3 Error Handling

None.

# 2.4 Security

None.

# 3 Change Tracking

This section identifies changes that were made to this document since the last release. Changes are classified as Major, Minor, or None.

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

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

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

The revision class **None** means that no new technical changes were introduced. Minor editorial and formatting changes may have been made, but the relevant technical content is identical to the last released version.

The changes made to this document are listed in the following table. For more information, please contact <u>dochelp@microsoft.com</u>.

Section	Description	Revision class
All	Updated supported products throughout document.	Major
1.3 Microsoft Implementations	Updated list of supported products.	Major
2.1.5 [RFC3501] Section 9, Body-extension Field	Added behavior for Outlook for Windows (new).	Major
2.2.1 [RFC3501] Section 2.2.1, Client Protocol Sender and Server Protocol Receiver	Added behavior for Outlook for Windows (new).	Major
2.2.2 [RFC3501] Section 2.2.2, Server Protocol Sender and Client Protocol Receiver	Added behavior for Outlook for Windows (new).	Major
2.2.4 [RFC3501] Section 2.3.1.1, Unique Identifier (UID) Message Attribute	Added behavior for Outlook for Windows (new).	Major
2.2.5 [RFC3501] Section 2.3.2, Flags Message Attribute	Added behavior for Outlook for Windows (new).	Major
2.2.9 [RFC3501] Section 2.3.6, Body Structure Message Attribute	Added behavior for Outlook for Windows (new).	Major
2.2.10 [RFC3501] Section 2.4, Message Texts	Added behavior for Outlook for Windows (new).	Major
2.2.14 [RFC3501] Section 5.1, Mailbox Naming	Added behavior for Outlook for Windows (new).	Major
2.2.19 [RFC3501] Section 5.5, Multiple Commands in Progress	Added behavior for Outlook for Windows (new).	Major
2.2.20 [RFC3501] Section 6.1.1, CAPABILITY Command	Added behavior for Outlook for Windows (new).	Major
2.2.21 [RFC3501] Section 6.1.2, NOOP Command	Added behavior for Outlook for Windows (new).	Major

Section	Description	Revision class
2.2.23 [RFC3501] Section 6.2.2, AUTHENTICATE Command	Added behavior for Outlook for Windows (new).	Major
2.2.24 [RFC3501] Section 6.2.3, LOGIN Command	Added behavior for Outlook for Windows (new).	Major
2.2.25 [RFC3501] Section 6.3.1, SELECT Command	Added behavior for Outlook for Windows (new).	Major
2.2.27 [RFC3501] Section 6.3.8, LIST Command	Added behavior for Outlook for Windows (new).	Major
2.2.34 [RFC3501] Section 6.4.5, FETCH Command	Added behavior for Outlook for Windows (new).	Major
2.2.35 [RFC3501] Section 6.4.6, STORE Command	Added behavior for Outlook for Windows (new).	Major
2.2.40 [RFC3501] Section 7.1, Server Responses — Status Responses	Added behavior for Outlook for Windows (new).	Major
2.2.44 [RFC3501] Section 7.2.2, LIST Response	Added behavior for Outlook for Windows (new).	Major

# 4 Index

#### Ľ

[RFC2822] Size Message Attribute 13

#### 8

8-bit and Binary Strings 15

#### A

ABNF Rules in General 10 Access Without Establishing Authentication 18 APPEND Command 23 AUTHENTICATE Command 18 Autologout Timer 17

#### В

Body Structure Message Attribute 14 Body-extension Field 10 BYE Response 29

# С

CAPABILITY Command 18 CAPABILITY Response 29 Change tracking 33 CHECK Command 24 Client Commands — Experimental/Expansion 27 Client MUST Implement the TLS RSA WITH RC4 128 MD5 Cipher Suite 11 Client MUST Read the OK Response Before Closing the Connection 10 Client Protocol Sender and Server Protocol Receiver 11 CLOSE Command 24 COPY Command 27

## Е

Envelope Structure Message Attribute 14 EXAMINE Command 22

## F

FETCH Command 24 FETCH Response 30 Field Definitions 31 Flag-extension Field 10 Flags Message Attribute 13 FLAGS Response 30

## G

Glossary 7

#### Ι

Informative references 8 Internal Date Message Attribute 13

#### Introduction 7

#### L

LIST Command 22 LIST Response 29 LOGIN Command 20 Logout State 14 LSUB Command 22

#### Μ

Mailbox Namespace Naming Convention 16 Mailbox Naming 15 Mailbox Size and Message Status Updates 17 Message Attributes 12 Message Texts 14 Multiple Commands in Progress 17

#### Ν

NOOP Command 18 Normative references 7

#### 0

OK Response 29 Optional Fields 31

#### Ρ

Port 143 10

## R

RECENT Response 30 References informative 8 normative 7 Response When No Command in Progress 17 Rule Regarding Spaces 10

## S

SEARCH Command 24 SEARCH Response 29 SELECT Command 20 Server Protocol Sender and Client Protocol Receiver 11 Server Responses 28 Server Responses — Status Responses 28 STARTTLS Security Considerations 31 STATUS Command 23 STORE Command 26 String 14

#### Т

Tracking changes 33

<u>UID Command</u> 27 <u>Unique Identifier (UID) Message Attribute</u> 12