[MS-STANXIMAP]:
Exchange Internet Message Access Protocol (IMAP) Standards Compliance

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Revision Summary

Date	Revision History	Revision Class	Comments
07/15/2009	1.0.0	Major	Initial Availability.
10/01/2008	1.1.0	Minor	Updated IP notice.
04/10/2009	2.0.0	Major	Updated applicable product releases.
07/15/2009	3.0.0	Major	Revised and edited technical content.
11/04/2009	3.1.0	Minor	Updated the technical content.
02/10/2010	3.1.0	None	Version 3.1.0 release
08/04/2010	3.2	Minor	Clarified the meaning of the technical content.

Contents

1 Introduction

This document specifies the level to which Microsoft® Exchange Server 2007 and Microsoft® Exchange Server 2010 conform to the **Internet Message Access Protocol (IMAP)**. A client that implements IMAP is able to access and manipulate electronic **mailboxes** on an IMAP server in a way that is functionally equivalent to local folders. The Exchange IMAP service component processes requests from an IMAP client.

1.1 Glossary

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

Augmented Backus-Naur Form (ABNF)
Generic Security Service Application Program Interface (GSSAPI)
Internet Message Access Protocol (IMAP)
Internet Message Access Protocol, Version 4 (IMAP4)
Internet Message Access Protocol – Version 4 Revision 1 (IMAP4rev1)
mailbox
message
NT LAN Manager (NTLM) Authentication Protocol
Simple Authentication and Security Layer (SASL)
Transmission Control Protocol (TCP)
Transport Layer Security (TLS)

The following terms are specific to this document:

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

1.2 Normative References

We conduct frequent surveys of the normative references to assure their continued availability. If you have any issue with finding a normative reference, please contact dochelp@microsoft.com. We will assist you in finding the relevant information. Please check the archive site, http://msdn2.microsoft.com/en-us/library/E4BD6494-06AD-4aed-9823-445E921C9624, as an additional source.

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

[RFC2246] Dierks, T., and Allen, C., "The TLS Protocol Version 1.0", RFC 2246, January 1999, http://www.ietf.org/rfc/rfc2246.txt

[RFC2822] Resnick, P., Ed., "Internet Message Format", RFC 2822, April 2001, http://www.ietf.org/rfc/rfc2822.txt

[RFC3501] Crispin, M., "INTERNET MESSAGE ACCESS PROTOCOL - VERSION 4rev1", RFC 3501, March 2003, ftp://ftp.rfc-editor.org/in-notes/rfc3501.txt

1.3 Informative References

[MS-OXGLOS] Microsoft Corporation, "Exchange Server Protocols Master Glossary", April 2008.

1.4 Microsoft Implementations

Microsoft® Exchange Server 2007

Microsoft® Exchange Server 2010

1.5 Conformance 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

1.6 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 Conformance 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."

By default, Exchange uses port 143 for TCP connections and port 993 for SSL connections. However, Exchange can be configured to use any port.

2.1.2 [RFC3501] Section 2.3.1.1, Unique Identifiers MUST NOT Change During Session

The specification states that the unique identifier of a message MUST NOT change during the session.

Exchange assigns a new UID to a revised message. (A message can be changed by another protocol and, under certain conditions, the revised message replaces the existing message.)

2.1.3 [RFC3501] Section 2.3.1.1, Combination of Mailbox Name, UIDVALIDITY, and UID MUST Refer to Single, Immutable message

The specification states: "The combination of mailbox name, UIDVALIDITY, and UID must refer to a single immutable message on that server forever. In particular, the internal date, [RFC2822] size, envelope, body structure, and message texts (RFC822, RFC822.HEADER, RFC822.TEXT, and all BODY[...] fetch data items) must never change."

Although Exchange adheres to this rule, other protocols have access to these messages, and some of these protocols modify message properties such as the message body.

2.1.4 [RFC3501] Section 7.2.1, Server MUST Support STARTTLS, LOGINDISABLED, and AUTH=PLAIN Capabilities

The specification states that the server implementation MUST support the STARTTLS, the LOGINDISABLED, and the AUTH=PLAIN capabilities.

Exchange does not support the LOGINDISABLED capability by default, but it can be configured to do so.

2.1.5 [RFC3501] Section 9, ABNF Rules in General

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

Exchange strictly follows the rules when sending responses, but is more forgiving when parsing commands from the client.

2.1.6 [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."

Exchange strictly follows the rules when sending responses. When parsing a command from the client, Exchange accepts a TAB character as a delimiter of the command itself, but allows only one space in all other places.

2.1.7 [RFC3501] Section 11.1, Server MUST Implement the TLS_RSA_WITH_RC4_128_MD5 Cipher Suite

The specification states that the server MUST implement the TLS_RSA_WITH_RC4_128_MD5 cipher suite.

Exchange 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].

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

Exchange 2007, Exchange 2010

Exchange does not enforce any particular format.

V0001:

The specification states that a different tag is generated by the client for each command.

Exchange 2007, Exchange 2010

Exchange accepts repeated use of the same tag in subsequent commands.

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

V0002:

The specification states: "Server data MAY be sent as a result of a client command, or MAY be sent unilaterally by the server."

Exchange 2007, Exchange 2010

Exchange sends data to the client unilaterally.

V0003:

The specification states: "Servers SHOULD enforce the syntax outlined in this specification strictly. Any client command with a protocol syntax error, including (but not limited to) missing or extraneous spaces or arguments, SHOULD be rejected, and the client given a BAD server completion response."

Exchange 2007, Exchange 2010

Exchange is liberal in parsing the spaces in commands. For more details, see section 2.2.2 of this document.

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

V0004:

The specification states that the unique identifier of a message SHOULD NOT change between sessions.

Exchange 2007, Exchange 2010

Exchange assigns a new UID to a revised message. (A message can be changed by another protocol and, under certain conditions, the revised message replaces the existing message.)

2.2.4 [RFC3501] Section 2.3.2, Flags Message Attribute

E0001:

The specification states that the server can define keywords. (A keyword is a non-system flag.)

Exchange 2007, Exchange 2010

Exchange defines the $MDNSent keyword, which is set on the message when the client sends a message delivery notification (MDN).

V0005:

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

Exchange 2007, Exchange 2010

Exchange does not support client-defined keywords.

2.2.5 [RFC3501] Section 2.3.4, [RFC2822] Size Message Attribute

V0006:

The specification defines the [RFC2822] size message attribute as the number of octets in the message.

Exchange 2007, Exchange 2010

By default, Exchange calculates the [RFC2822] size based on the amount of storage space that the message actually occupies. However, Exchange can be configured to base the calculation of the [RFC2822] size on the exact MIME size of the message.

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

V0007:

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.

Exchange 2007, Exchange 2010

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

2.2.7 [RFC3501] Section 5.1, Mailbox Naming

V0008:

The specification takes no position on case-sensitivity in non-INBOX mailbox names.

Exchange 2007, Exchange 2010

Exchange is case-insensitive regarding non-INBOX mailbox names.

V0009:

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

Exchange 2007

Exchange returns a literal for a mailbox name that includes the backslash character ("\"), but does not return a literal for a mailbox name that includes other atom-specials.

Exchange 2010

Exchange returns a literal for a mailbox name that includes the backslash character ("\") or the double-quote character (""), but does not return a literal for a mailbox name that includes other atom-specials.

V0010:

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."

Exchange 2007, Exchange 2010

Exchange allows a mailbox name to contain a wildcard character and other special characters (such as atom-specials), provided that the characters are escaped.

V0011:

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

Exchange 2007, Exchange 2010

Exchange uses the forward slash ("/") as the hierarchy delimiter.

V0012:

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

Exchange 2007, Exchange 2010

Exchange allows a mailbox name to contain "&", provided that the "&" is encoded as specified in section 5.1.3 of the specification. An unescaped "&" would be treated as a shift to the modified BASE64 encoding, as described in section 5.1.3 of the specification. Exchange allows unescaped "#" in folder names.

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

V0013:

The specification states that agents other than the server MAY add messages to the mailbox, change the flags of the messages in the mailbox, or even remove messages from the mailbox.

Exchange 2007, Exchange 2010

Exchange allows non-IMAP protocols to add messages, change flags of messages, and remove messages.

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

V0014:

The specification states: "Server implementations are permitted to send an untagged response (except for EXPUNGE) while there is no command in progress. Server implementations that send such responses MUST deal with flow control considerations. Specifically, they MUST either (1) verify that the size of the data does not exceed the underlying transport's available window size, or (2) use non-blocking writes."

Exchange 2007, Exchange 2010

Exchange can send an untagged response when there is no command in progress. Exchange has mechanisms to manage flow control. Any untagged responses that Exchange sends are brief and, therefore, fit into most MTA windows.

2.2.10 [RFC3501] Section 5.4, Autologout Timer

V0015:

The specification states: "If a server has an inactivity autologout timer, the duration of that timer MUST be at least 30 minutes."

Exchange 2007, Exchange 2010

Exchange has an inactivity autologout timer with a default duration of 30 minutes, but can be configured to use a duration of less than 30 minutes.

E0002:

The specification does not describe any other required or optional autologout timers.

Exchange 2007, Exchange 2010

Exchange implements an unauthenticated timer, which limits the duration of an unauthenticated session. The default duration of the unauthenticated timer is 60 seconds, but Exchange can be configured to use a duration of less than 60 seconds. The receipt of any command from the client during that interval does not reset the unauthenticated timer.

2.2.11 [RFC3501] Section 5.5, Multiple Commands in Progress

V0016:

The specification states that a server MAY begin processing another command before processing the current command to completion, subject to ambiguity rules.

Exchange 2007, Exchange 2010

Exchange does not begin processing another command before processing the current command to completion. (Exchange processes commands serially.)

V0017:

The specification states: "If the server detects a possible ambiguity, it MUST execute commands to completion in the order given by the client."

Exchange 2007, Exchange 2010

Exchange processes commands serially and, therefore, does not need to deal with ambiguities.

2.2.12 [RFC3501] Section 6.2, Client Commands — Not Authenticated State

V0018:

The specification states that server implementations MAY allow access to certain mailboxes without establishing authentication.

Exchange 2007, Exchange 2010

Exchange does not allow access to mailboxes without authentication.

V0019:

The specification states that a client can access mailboxes without establishing authentication by using either the ANONYMOUS authenticator or the LOGIN command with a user name of "anonymous".

Exchange 2007, Exchange 2010

Exchange does not support either the ANONYMOUS authenticator or the LOGIN command with an anonymous user name.

2.2.13 [RFC3501] Section 6.2.1, STARTTLS Command

V0020:

The specification states: "The server MAY advertise different capabilities after STARTTLS."

Exchange 2007, Exchange 2010

Exchange sends capabilities only in response to a CAPABILITY command from the client. Exchange does not send capabilities automatically by using the CAPABILITY response code. For more details, see sections 2.2.14, 2.2.15, and 2.2.30 of this document.

2.2.14 [RFC3501] Section 6.2.2, AUTHENTICATE Command

V0021:

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."

Exchange 2007, Exchange 2010

Exchange does not support negotiation of an OPTIONAL security layer.

E0003:

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

Exchange 2007

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

- **NTLM**
- **GSSAPI** (also called Kerberos)

Exchange 2010

In addition to the PLAIN authentication mechanism, Exchange implements the GSSAPI authentication mechanism.

V0022:

The specification states that server sites SHOULD NOT use any configuration that permits a plaintext password mechanism without a protection mechanism against password snooping.

Exchange 2007, Exchange 2010

By default, Exchange does not permit plaintext password authentication, but can be configured to allow plaintext password authentication without protection against password snooping.

E0004:

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

Exchange 2007, Exchange 2010

For details, see E0003 in this section.

V0023:

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."

Exchange 2007, Exchange 2010

Exchange does not include a CAPABILITY response code in its response to a successful AUTHENTICATE command. Exchange sends capabilities only in response to a CAPABILITY command from the client. For more details, see sections 2.2.13, 2.2.15, and 2.2.30 of this document.

2.2.15 [RFC3501] Section 6.2.3, LOGIN Command

V0024:

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."

Exchange 2007, Exchange 2010

Exchange does not include a CAPABILITY response code in its response to a successful LOGIN command. Exchange sends capabilities only in response to a CAPABILITY command from the client. For more details, see sections 2.2.13, 2.2.14, and 2.2.30 of this document.

2.2.16 [RFC3501] Section 6.3.3, CREATE Command

V0025:

The specification states: "If the server's hierarchy separator character appears elsewhere in the name, the server SHOULD create any superior hierarchical names that are needed for the CREATE command to be successfully completed."

Exchange 2007, Exchange 2010

Exchange creates all superior hierarchical names, wherever possible, to allow successful completion of the CREATE command.

2.2.17 [RFC3501] Section 6.3.4, DELETE Command

V0026:

The specification states: "It is permitted to delete a name that has inferior hierarchical names and does not have the \Noselect mailbox name attribute."

Exchange 2007, Exchange 2010

Exchange does not allow a mailbox to be deleted if it has inferior hierarchical names.

2.2.18 [RFC3501] Section 6.3.6, SUBSCRIBE Command

V0027:

The specification states: "A server MAY validate the mailbox argument to SUBSCRIBE to verify that it exists."

Exchange 2007, Exchange 2010

Exchange does not validate that the mailbox exists.

2.2.19 [RFC3501] Section 6.3.8, LIST Command

V0028:

The specification prescribes rules that apply to mailbox names that are returned in the LIST response.

Exchange 2007, Exchange 2010

If a mailbox name contains the backslash character ("\"), then Exchange returns the mailbox name as a literal preceded by a <length> field.

V0029:

The specification states: "If the reference argument is not a level of mailbox hierarchy (that is, it is a \NoInferiors name), and/or the reference argument does not end with the hierarchy delimiter, it is implementation-dependent how this is interpreted."

Exchange 2007, Exchange 2010

Exchange simply returns "LIST completed" in this case.

V0030:

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

Exchange 2007, Exchange 2010

Exchange does not hide any mailboxes from wildcard characters.

2.2.20 [RFC3501] Section 6.3.9, LSUB Command

V0031:

The specification prescribes rules that apply to mailbox names that are returned in the LSUB response.

Exchange 2007

If a mailbox name contains the backslash character ("\"), then Exchange returns the mailbox name as a literal preceded by a <length> field.

Exchange 2010

If a mailbox name contains the backslash character ("\") or the double-quote character (""), then Exchange returns the mailbox name as a literal preceded by a <length> field.

V0032:

The specification states: "The returned untagged LSUB response MAY contain different mailbox flags from a LIST untagged response."

Exchange 2007, Exchange 2010

Exchange supports an untagged LSUB response containing mailbox flags that are different from those in an untagged LIST response. The flags differ according to the mailbox's existing flags.

2.2.21 [RFC3501] Section 6.3.11, APPEND Command

V0033:

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."

Exchange 2007, Exchange 2010

If the mailbox is currently selected, then Exchange does not immediately send an untagged EXISTS response. Instead, Exchange sends an untagged EXISTS response upon successful completion of APPEND within the currently selected mailbox.

2.2.22 [RFC3501] Section 6.4.1, CHECK Command

V0034:

The specification defines the CHECK command.

Exchange 2007, Exchange 2010

Exchange implements the CHECK command as identical to the NOOP command.

2.2.23 [RFC3501] Section 6.4.4, SEARCH Command

V0035:

The specification states: "US-ASCII MUST be supported; other IANA character sets MAY be supported."

Exchange 2007, Exchange 2010

Exchange supports only the US-ASCII character set.

V0036:

The specification states that the tagged NO response SHOULD contain the BADCHARSET response code, which MAY list the IANA character sets that are supported by the server.

Exchange 2007, Exchange 2010

Exchange includes the BADCHARSET response code followed by (US-ASCII).

V0037:

The specification defines the KEYWORD <flag> search key as: "Messages with the specified keyword flag set."

Exchange 2007, Exchange 2010

Exchange supports only the $MDNSent keyword flag for the KEYWORD search key. For more details, see section 2.2.4 of this document.

V0038:

The specification defines the LARGER <n> search key as: "Messages with an [RFC2822] size larger than the specified number of octets."

Exchange 2007, Exchange 2010

If the [RFC2822] size of the message is known, then Exchange compares the [RFC2822] size to the specified number of octets; otherwise, Exchange compares the stored-message size (this is the amount of storage space that the message actually occupies) to the specified number of octets. Exchange can be configured to evaluate the [RFC2822] size in all circumstances.

V0039:

The specification defines the SMALLER <n> search key as: "Messages with an [RFC2822] size smaller than the specified number of octets."

Exchange 2007, Exchange 2010

If the [RFC2822] size of the message is known, then Exchange compares the [RFC2822] size with the specified number of octets; otherwise, Exchange compares the stored-message size (this is the amount of storage space that the message actually occupies) of the message to the specified number of octets. Exchange can be configured to evaluate the [RFC2822] size in all circumstances.

V0040:

The specification defines the UNKEYWORD <flag> search key as: "Messages that do not have the specified keyword flag set."

Exchange 2007, Exchange 2010

Exchange supports only the $MDNSent keyword flag for the UNKEYWORD search key. For more details, see section 2.2.4 of this document.

V0041:

The specification states: "Searching criteria consist of one or more search keys."

Exchange 2007, Exchange 2010

Exchange supports recursive grouping of criteria as follows:

- There can be as many as ten levels of recursion.
- Within each recursion, any number of search keys can be used to specify the criteria.
- Parentheses are used to delimit the levels of recursion. For example, four levels of recursion will have the following form:

  (criteria 1 (OR criteria 2 (OR criteria 3 (OR criteria 4))))

2.2.24 [RFC3501] Section 6.4.5, FETCH Command

V0042:

The specification states that some data items, identified in the formal syntax under the msg-att-dynamic rule, MAY change, either as a result of a STORE command, or due to external events.

Exchange 2007, Exchange 2010

Exchange allows such data items to change either as a result of a STORE command or due to external events.

V0043:

The specification describes the RFC822.SIZE data item as: "The [RFC2822] size of the message."

Exchange 2007, Exchange 2010

If the [RFC2822] size of the message is known, then Exchange returns that value; otherwise, Exchange returns the stored-message size (this is the amount of storage space that the message actually occupies). Exchange can be configured to return the [RFC2822] size in all circumstances.

2.2.25 [RFC3501] Section 6.4.6, STORE Command

V0044:

The specification states that, regardless of whether the .SILENT suffix was used in the data item name, the server SHOULD send an untagged FETCH response if a message's flags are changed by an external source.

Exchange 2007, Exchange 2010

Exchange never sends an untagged FETCH response if a message's flags are changed by an external source.

2.2.26 [RFC3501] Section 6.5, Client Commands — Experimental/Expansion

V0045:

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

Exchange 2007, Exchange 2010

Exchange does not define any such commands.

2.2.27 [RFC3501] Section 7.1, Server Responses — Status Responses

V0046:

The specification states that status responses (OK, NO, BAD, PREAUTH, and BYE) MAY include an OPTIONAL response code.

Exchange 2007, Exchange 2010

Exchange includes optional response codes for certain status responses.

V0047:

The specification defines the ALERT response code and the PARSE response code.

Exchange 2007, Exchange 2010

Exchange does not implement the ALERT response code and the PARSE response code.

2.2.28 [RFC3501] Section 7.1.1, OK Response

V0048:

The specification states: "The untagged form indicates an information-only message; the nature of the information MAY be indicated by a response code."

Exchange 2007, Exchange 2010

Exchange sends an untagged OK response that includes human-readable text with no response code.

2.2.29 [RFC3501] Section 7.1.4, PREAUTH Response

V0049:

The specification defines the PREAUTH response.

Exchange 2007, Exchange 2010

Exchange does not implement the PREAUTH response.

2.2.30 [RFC3501] Section 7.2.1, CAPABILITY Response

V0050:

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."

Exchange 2007, Exchange 2010

Exchange does not use the CAPABILITY response code to automatically send capabilities to the client. Exchange sends capabilities to the client only when the client requests capabilities by using the CAPABILITY command. For more details, see sections 2.2.13, 2.2.14, and 2.2.15 of this document.

2.2.31 [RFC3501] Section 7.2.2, LIST Response

V0051:

The specification defines four name attributes for the LIST response.

Exchange 2007, Exchange 2010

Exchange uses the \Marked and the \Noselect name attributes. Exchange does not use the \Noinferiors and the \Unmarked name attributes.

2.2.32 [RFC3501] Section 7.2.6, FLAGS Response

V0052:

The specification states that flags other than the system flags can also exist, depending on server implementation.

Exchange 2007, Exchange 2010

For more details, see section 2.2.4 of this document.

2.2.33 [RFC3501] Section 7.4.1, EXPUNGE Response

V0053:

The specification states that the server does not need to send an EXISTS response after an untagged EXPUNGE response decrements the number of messages in the mailbox.

Exchange 2007, Exchange 2010

Upon successful completion of the EXPUNGE command, Exchange sends an EXISTS response with the updated size of the mailbox.

2.2.34 [RFC3501] Section 7.4.2, FETCH Response

V0054:

The specification states: "Extension data is never returned with the BODY fetch, but can be returned with a BODYSTRUCTURE fetch."

Exchange 2007, Exchange 2010

Exchange returns extension data as part of a BODYSTRUCTURE fetch.

V0055:

The specification states that a server can return a NIL envelope member in the case where the Date, Subject, In-Reply-To, or Message-ID header line are present but empty.

Exchange 2007, Exchange 2010

If the Date, Subject, In-Reply-To, or Message-ID header line are present but empty, Exchange returns a NIL envelope member.

2.2.35 [RFC3501] Section 11.1, STARTTLS Security Considerations

V0056:

The specification states that the server SHOULD implement the TLS_DHE_DSS_WITH_3DES_EDE_CBC_SHA cipher suite, as specified in [RFC2246].

Exchange 2007, Exchange 2010

Exchange 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.

V0057:

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.

Exchange 2007, Exchange 2010

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

2.2.36 [RFC3501] Section 11.2, Other Security Considerations

V0058:

The specification states: "A server SHOULD have mechanisms in place to limit or delay failed AUTHENTICATE/LOGIN attempts."

Exchange 2007, Exchange 2010

Exchange allows four failed attempts before it drops the session. However, Exchange does not have any cross-session limits.

2.3 Error Handling

Unless otherwise specified in the previous sections, Exchange handles errors according to the following:

- Invalid property values and invalid parameter values are ignored.
- Invalid components are ignored.

2.4 Security

None.

3 Change Tracking

This section identifies changes that were made to the [MS-STANXIMAP] protocol document between the February 2010 and August 2010 releases. Changes are classified as New, Major, Minor, Editorial, or No change.

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

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

- A document revision that incorporates changes to interoperability requirements or functionality.
- An extensive rewrite, addition, or deletion of major portions of content.
- The removal of a document from the documentation set.
- Changes made for template compliance.

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

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

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

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

- New content added.
- Content updated.
- Content removed.
- New product behavior note added.
- Product behavior note updated.
- Product behavior note removed.
- New protocol syntax added.
- Protocol syntax updated.
- Protocol syntax removed.
- New content added due to protocol revision.
- Content updated due to protocol revision.
- Content removed due to protocol revision.
- New protocol syntax added due to protocol revision.

- Protocol syntax updated due to protocol revision.
- Protocol syntax removed due to protocol revision.
- New content added for template compliance.
- Content updated for template compliance.
- Content removed for template compliance.
- Obsolete document removed.

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

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

- **Protocol syntax** refers to data elements (such as packets, structures, enumerations, and methods) as well as interfaces.
- **Protocol revision** refers to changes made to a protocol that affect the bits that are sent over the wire.

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

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
1.2 Normative References	57619 Added [RFC2119] to list of references.	N	Content update.
1.3 Informative References	55751 Added [MS-OXGLOS] to the list of informative references.	N	Content update.
1.4 Microsoft Implementations	57214 Changed product names from Outlook 2007 and Outlook 2010 to Exchange 2007 and Exchange 2010.	N	Content update.

4 Index