

[MS-OXDOC]: Exchange Server Protocols Document Roadmap

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Revision Summary

Date	Revision History	Revision Class	Comments
04/04/2008	0.1	Major	Initial Availability.
06/27/2008	1.0	Major	Initial Release.
08/06/2008	1.01	Minor	Revised and edited technical content.
09/03/2008	1.02	Minor	Changed document title.
12/03/2008	1.03	Minor	Updated IP notice.
04/10/2009	2.0.0	Major	Updated technical content for new product releases.
07/15/2009	3.0.0	Major	Revised and edited for technical content.
11/04/2009	4.0.0	Major	Updated and revised the technical content.
02/10/2010	4.0.0	None	Version 4.0.0 release
05/05/2010	4.0.0	None	Version 4.0.0 release
08/04/2010	4.0.0	No change	No changes to the meaning, language, or formatting of the technical content.
11/03/2010	4.0.0	No change	No changes to the meaning, language, or formatting of the technical content.
03/18/2011	4.1	Minor	Clarified the meaning of the technical content.

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1 Documentation Scope and Objectives

The Microsoft® Exchange Server protocol documentation provides detailed technical specifications about the protocols, protocol extensions, and structures that are used by computers running Microsoft® Exchange Server 2003, Microsoft® Exchange Server 2007, or Microsoft® Exchange Server 2010 to provide messaging and other services to client devices and applications. Each specification describes the technical requirements, dependencies, and limitations of a specific protocol, protocol extension, or structure, and it identifies any related behaviors that are specific to Exchange 2003, Exchange 2007, or Exchange 2010.

In addition to the technical specifications, the documentation includes overview and reference documents that provide background information, overviews of relationships and interactions between protocols, extensions, and structures, and technical reference information, such as common properties.

1.1 Glossary

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 References

1.2.1 Normative References

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

1.2.2 Informative References

[MS-MCI] Microsoft Corporation, "[MCI Compression and Decompression](#)", April 2008.

[MS-OXGLOS] Microsoft Corporation, "[Office Exchange Protocols Master Glossary](#)", April 2008.

[MS-OXPROTO] Microsoft Corporation, "[Exchange Server Protocols Overview](#)", June 2008.

[MS-OXREF] Microsoft Corporation, "[Exchange Server Protocols Master Reference](#)", June 2008.

[MS-PATCH] Microsoft Corporation, "[LZX DELTA Compression and Decompression](#)", April 2008.

2 Audience

The Microsoft Exchange Server protocol documentation is intended for use in conjunction with publicly available standard specifications, network programming art, and Exchange distributed systems concepts. It assumes that the reader is either familiar with this material or has immediate access to it.

The documentation supports the following audiences:

- For implementers, provides conceptual and reference information that enables them to implement one or more protocols, protocol extensions, or structures for a task or scenario.
- For reviewers, provides definitive resources for evaluating or understanding one or more protocols, protocol extensions, or structures.

3 Documentation Architecture

The Microsoft Exchange Server protocol documentation includes an overview document, reference documents, and technical specifications.

3.1 Overview and Reference Documents

The Microsoft Exchange Server protocol documentation includes an overview document that describes the protocols, extensions, and structures that are implemented in Microsoft Exchange, including conceptual information about messaging and client/server interactions, an overview of the functional areas and architectural design principles of the system, and usage scenarios that illustrate operation of the system in the context of common tasks, such as sending a message and retrieving user information.

In addition to the overview document, the documentation includes reference documents that provide supporting material to assist in understanding and implementing the protocols, extensions, and structures that are part of the system.

The following overview and reference documents are part of the protocol documentation.

Document name	Description
Exchange Server Protocols System Overview ([MS-EXPROTO])	Provides information about the protocols, extensions, and structures that are implemented in the system and the relationships between those protocols, extensions, and structures.
Exchange Server Protocols Master Glossary ([MS-EXGLOS])	Provides a list of terms that are used in the documentation and the definitions of those terms.
Exchange Server Protocols Master Reference ([MS-EXREF])	Provides a list of all the normative and informative references that are cited in the documentation, and links to those references.
LZX DELTA Compression and Decompression ([MS-PATCH])	Provides technical details about the LZX Delta compression scheme, which is a derivative of the Microsoft Cabinet LZX format with some modifications to facilitate efficient delta compression.
MCI Compression and Decompression ([MS-MCI])	Provides technical details about the format of MSZIP compressed data, which can be used to encode and decode data in cabinet files.

3.2 Technical Specifications

The technical specifications describe the rules that govern the format, semantics, timing, sequencing, error handling, and other information about the relevant protocols, protocol extensions, and structures. They do not include source code or internal, implementation-specific details about those protocols, extensions, or structures, such as internal state management, data validation methods, or the architecture of a specific product or set of software components.

The following types of specifications are part of the protocol documentation.

Specification type	Description
Algorithm	Used to describe an algorithm or an extension to an algorithm. It does not describe any related data structures.

Specification type	Description
Block	Used to describe a packet-based protocol.
Remote procedure call (RPC)	Used to describe a request/response RPC-based protocol in which all arguments come directly from a higher layer and all return codes, output parameters, and exceptions are passed unmodified.
SOAP	Used to describe a packet-based protocol and is designed explicitly for specifications about request/response, SOAP-based protocols that use WSDL.
Standards support	Used to describe how an implementation or set of implementations conforms to or varies from a public, industry standard.
Structure	Used to describe a common structure that is used by multiple protocols. It does not include information about related behavior. Related behavior is defined in the specifications for protocols that use the structure.

Each specification minimally provides the following information:

- An overview of what the protocol or structure does. Some specifications also include diagrams that illustrate the protocol architecture and communication sequences.
- A list of terms that are used in the specification.
- A list of normative references that are cited by the specification. A normative reference is a published document containing information that is required to understand or implement the protocol that is described in the specification.
- A list of informative references that are cited by the specification. An informative reference is a public document containing additional, optional information that can be helpful in understanding or implementing the protocol that is described in the specification.
- Detailed information about the data that is transferred or stored by a protocol or structure.
- Notes about differences in the way that a protocol or structure was implemented in a specific product version.

4 Exchange Server Protocols Web Site

The Microsoft Exchange Server protocol documentation is available online at <http://msdn.microsoft.com/en-us/library/cc307725.aspx>. Please check the Web site periodically for updates.

5 Change Tracking

This section identifies changes that were made to the [MS-OXDOCO] protocol document between the November 2010 and March 2011 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
1.1 Glossary	Added a new section to identify glossary terms that are used in the document.	N	New content added.
1.2 References	Added a new section to identify references that are cited in the document.	N	New content added.
3.2 Technical Specifications	Updated descriptions of the specification types and added descriptions for the algorithm, block, SOAP, and standards support specification types.	N	Content updated.
3.2 Technical Specifications	Consolidated and clarified information about the types of information that are included in a technical specification.	N	Editorially updated.

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