[MS-OXREF]:
Exchange Server Protocols Master Reference

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Revision Summary

Date	Revision History	Revision Class	Comments
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06/27/2008	1.0		Initial Release.
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03/04/2009	1.05		Updated references.
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07/15/2009	3.0	Major	Revised and edited for technical content.
11/04/2009	3.0.1	Editorial	Revised and edited the technical content
02/10/2010	4.0.0	Major	Updated and revised the technical content.
05/05/2010	5.0.0	Major	Updated and revised the technical content.
08/04/2010	5.1	Minor	Clarified the meaning of the technical content.
11/03/2010	5.2	Minor	Clarified the meaning of the technical content.
03/18/2011	6.0	Major	Significantly changed the technical content.
08/05/2011	7.0	Major	Significantly changed the technical content.
10/07/2011	8.0	Major	Significantly changed the technical content.
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02/10/2014	16.0	Major	Significantly changed the technical content.

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1 Support

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.

2 External References

[ASF] Microsoft Corporation, "Advanced Systems Format Specification", December 2004, http://download.microsoft.com/download/7/9/0/790fecaa-f64a-4a5e-a430-0bccdab3f1b4/ASF_Specification.doc

[C706] The Open Group, "DCE 1.1: Remote Procedure Call", C706, August 1997, https://www2.opengroup.org/ogsys/catalog/c706

[Cormen] Cormen, T., Leiserson, C., Rivest, R., and Stein, C., "Introduction to Algorithms", 3rd edition, Massachusetts Institute of Technology, 2009, ISBN: 978-0-262-03384-8.

[E164] ITU-T, "The International Public Telecommunication Numbering Plan", Recommendation E.164, February 2005, http://www.itu.int/rec/T-REC-E.164/e

Note There is a charge to download the specification.

[FIPS180] FIPS PUBS, "Secure Hash Standard", FIPS PUB 180-1, April 1995, http://www.itl.nist.gov/fipspubs/fip180-1.htm

[G711] ITU-T, "Pulse code modulation (PCM) of voice frequencies", Recommendation G.711, November 1988, http://www.itu.int/rec/T-REC-G.711-198811-I/en

[GSM610] ETSI, "European digital cellular telecommunications system (Phase 1); Full rate speech; Transcoding (GSM 06.10)", February 1992, http://pda.etsi.org/pda/home.asp?wki_id=v9jLO9Nb7wSVbbYKNyW

[HTML] World Wide Web Consortium, "HTML 4.01 Specification", December 1999, http://www.w3.org/TR/html4/

[IEEE1003.1] The Open Group, "IEEE Std 1003.1, 2004 Edition", 2004, http://www.unix.org/version3/ieee_std.html

Note Registration is required to view or download this specification.

[IETFDRAFT-JWT] Internet Engineering Task Force (IETF), "JSON Web Token (JWT)", draft-ietf-oauth-json-web-token-08, April 2013, http://tools.ietf.org/html/draft-ietf-oauth-json-web-token-08

[ISO/IEC8802-3] ISO/IEC, "Information technology -- Telecommunications and information exchange between systems -- Local and metropolitan area networks -- Specific requirements -- Part 3", Carrier sense multiple access with collision detection (CSMA/CD) access method and physical layer specifications, ISO/IEC 8802-3:2000, http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=31002

[ISO-8601] International Organization for Standardization, "Data Elements and Interchange Formats - Information Interchange - Representation of Dates and Times", ISO/IEC 8601:2004, December 2004, http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=40874&ICS1=1&ICS2=140&ICS3=30

Note There is a charge to download the specification.

[ITU-X.690-2008] ITU-T, "X.690 : Information technology - ASN.1 encoding rules: Specification of Basic Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules (DER)", Recommendation X.690, November 2008, http://www.itu.int/rec/T-REC-X.690-200811-I/en

[LDAPEX-SVB] Boreham, D., Sermersheim, J., and Kashi, A., "LDAP Extensions for Scrolling View Browsing of Search Results", Internet-Draft <draft-ietf-ldapext-ldapv3-vlv-09.txt>, November 2002, http://www.ietf.org/proceedings/02nov/I-D/draft-ietf-ldapext-ldapv3-vlv-09.txt

[MacBin] Apple Corporation, "Macintosh Binary Transfer Format ("MacBinary III") Standard Proposal", December 1996, http://web.archive.org/web/20050305044255/www.lazerware.com/formats/macbinary/macbinary_iii.html

[MSDN-ADDP] Microsoft Corporation, "Establishing an ActiveSync Desktop-Device Partnership", http://msdn.microsoft.com/en-us/library/aa917378.aspx

[MSDN-APM] Marquardt, T., "ASP.NET Performance Monitoring, and When to Alert Administrators", http://msdn.microsoft.com/en-us/library/ms972959.aspx

[MSDN-CESHU] Microsoft Corporation, "Constructing Exchange Store HTTP URLs", http://msdn.microsoft.com/en-us/library/aa493863(EXCHG.80).aspx

[MSDN-DVASP] Microsoft Corporation, "DVASPECT enumeration", http://msdn.microsoft.com/en-us/library/ms690318.aspx

[MSDN-ENM] Microsoft Corporation, "Event Notification in MAPI", http://msdn.microsoft.com/en-us/library/ms528269(EXCHG.10).aspx

[MSDN-JavaScriptApiOffice] Microsoft Corporation, "JavaScript API for Office", http://msdn.microsoft.com/en-us/library/fp142185

[MSDN-RpcBindingSetAuthInfoEx] Microsoft Corporation, "RpcBindingSetAuthInfoEx function", http://msdn.microsoft.com/en-us/library/aa375608(v=VS.85).aspx

[MSDN-SOCKADDR] Microsoft Corporation, "sockaddr", http://msdn.microsoft.com/en-us/library/ms740496.aspx

[MSDN-STS] Microsoft Corporation, "About Structured Storage", http://msdn.microsoft.com/en-us/library/aa378734.aspx

[MSDN-UAF] Microsoft Corporation, "UUENCODE Attachment Format", http://msdn.microsoft.com/en-us/library/aa579638(v=EXCHG.80).aspx

[MSDN-WS2] Microsoft Corporation, "Windows Sockets 2", http://msdn.microsoft.com/en-us/library/ms740673(VS.85).aspx

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

[MSFT-ARPTC] Microsoft Corporation, "AD RMS Policy Template Considerations", http://technet.microsoft.com/en-us/library/dd996658(WS.10).aspx

[MSFT-AUTODISCOVER] Masterson, J., Turick, J., Smith IV, R., "White Paper: Exchange 2007 Autodiscover Service", http://technet.microsoft.com/en-us/library/bb332063(EXCHG.80).aspx

[MSFT-ConfigStaticUDPPort] Microsoft Corporation, "Configure a Static UDP Port for Push Notifications in an Exchange 2010 Environment (en-US)", http://social.technet.microsoft.com/wiki/contents/articles/2542.configure-a-static-udp-port-for-push-notifications-in-an-exchange-2010-environment.aspx

[MSFT-DNS-SRV] Microsoft Corporation, "A new feature is available that enables Outlook 2007 to use DNS Service Location (SRV) records to locate the Exchange Autodiscover service", http://support.microsoft.com/?kbid=940881

[MSFT-IRMEAS] Microsoft Corporation, "Understanding Information Rights Management in Exchange ActiveSync", http://technet.microsoft.com/en-us/library/ff657743(EXCHG.141).aspx

[MSFT-RTF] Microsoft Corporation, "Rich Text Format (RTF) Specification", version 1.9.1, March 2008, http://www.microsoft.com/en-us/download/details.aspx?id=10725

[MSFT-SAP] Microsoft Corporation, "Security and Protection", http://technet.microsoft.com/en-us/library/aa996775(EXCHG.80).aspx

[MSFT-SETIMAP] Microsoft Corporation, "Set-ImapSettings", http://technet.microsoft.com/en-us/library/aa998252(EXCHG.140).aspx

[MSFT-WPXTJ] Microsoft Corporation, "White Paper: Exchange 2007 Transport Journaling", September 2007, http://technet.microsoft.com/en-us/library/bb738122(EXCHG.80).aspx

[MSKB908027] Microsoft Corporation, "Exchange Server 2003 does not include the 'In-reply-to' header field when you use Outlook or Outlook Web Access to reply to an e-mail message that originated from outside the organization", version 3.0, October 2011, http://support.microsoft.com/kb/908027

[RFC1034] Mockapetris, P., "Domain Names - Concepts and Facilities", STD 13, RFC 1034, November 1987, http://www.ietf.org/rfc/rfc1034.txt

[RFC1035] Mockapetris, P., "Domain Names - Implementation and Specification", STD 13, RFC 1035, November 1987, http://www.ietf.org/rfc/rfc1035.txt

[RFC1123] Braden, R., "Requirements for Internet Hosts - Application and Support", STD 3, RFC 1123, October 1989, http://www.ietf.org/rfc/rfc1123.txt

[RFC1274] Barker, P., and Kille, S., "The COSINE and Internet X.500 Schema", RFC 1274, November 1991, http://www.ietf.org/rfc/rfc1274.txt

[RFC1279] Hardcastle-Kille, S., "X.500 and Domains", RFC 1279, November 1991, http://www.rfc-editor.org/rfc/rfc1279.txt

[RFC1321] Rivest, R., "The MD5 Message-Digest Algorithm", RFC 1321, April 1992, http://www.ietf.org/rfc/rfc1321.txt

[RFC1510] Kohl, J., and Neuman, C., "The Kerberos Network Authentication Service (V5)", RFC 1510, September 1993, http://www.ietf.org/rfc/rfc1510.txt

[RFC1521] Borenstein, N., and Freed, N., "MIME (Multipurpose Internet Mail Extensions) Part One: Mechanisms for Specifying and Describing the Format of Internet Message Bodies", RFC 1521, September, 1993, http://www.ietf.org/rfc/rfc1521.txt

[RFC1522] Moore, K., "MIME (Multipurpose Internet Mail Extensions) Part Two: Message Header Extensions for Non-ASCII Text", RFC 1522, September 1993, http://www.rfc-editor.org/rfc/rfc1522.txt

[RFC1652] Klensin, J., Freed, N., Ed., Rose, M., et al., "SMTP Service Extension for 8bit-MIMEtransport", RFC 1652, July 1994, http://www.rfc-editor.org/rfc/rfc1652.txt

[RFC1731] Myers, J., "IMAP4 Authentication Mechanisms", RFC 1731, December 1994, http://www.rfc-editor.org/rfc/rfc1731.txt

[RFC1734] Myers, J., "POP3 AUTHentication Command", RFC 1734, December 1994, http://www.ietf.org/rfc/rfc1734.txt

[RFC1738] Berners-Lee, T., Masinter, L., and McCahill, M., "Uniform Resource Locators (URL)", RFC 1738, December 1994, http://www.ietf.org/rfc/rfc1738.txt

[RFC1740] Faltstrom, P., Crocker, D., and Fair, E., "MIME Encapsulation of Macintosh files – MacMIME", RFC 1740, December 1994, http://www.rfc-editor.org/rfc/rfc1740.txt

[RFC1741] Faltstrom, P., Crocker, D., and Fair, E., "MIME Content Type for BinHex Encoded Files", RFC 1741, December 1994, http://www.rfc-editor.org/rfc/rfc1741.txt

[RFC1766] Alvestrand, H., "Tags for the Identification of Languages", RFC 1766, March 1995, http://www.ietf.org/rfc/rfc1766.txt

[RFC1823] Howes, T., and Smith, M., "The LDAP Application Program Interface", RFC 1823, August 1995, http://www.rfc-editor.org/rfc/rfc1823.txt

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

[RFC1869] Klensin, J., Freed, N., Ed., Rose, M., et al., "SMTP Service Extensions", STD 10, RFC 1869, November 1995, http://rfc-editor.org/rfc/rfc1869.txt

[RFC1870] Klensin, J., Freed, N., Ed., and Moore, K., "SMTP Service Extension for Message Size Declaration", STD 10, RFC 1870, November 1995, http://www.rfc-editor.org/rfc/rfc1870.txt

[RFC1891] Moore, K., "SMTP Service Extension for Delivery Status Notifications", RFC 1891, January 1996, http://www.rfc-editor.org/rfc/rfc1891.txt

[RFC1896] Resnick, P., and Walker, A., "The text/enriched MIME Content-type", RFC 1896, February 1996, http://www.rfc-editor.org/rfc/rfc1896.txt

[RFC1939] Myers, J., and Rose, M., "Post Office Protocol - Version 3", STD 53, RFC 1939, May 1996, http://www.ietf.org/rfc/rfc1939.txt

[RFC1945] Berners-Lee, T., Fielding, R., and Frystyk, H., "Hypertext Transfer Protocol -- HTTP/1.0", RFC 1945, May 1996, http://www.ietf.org/rfc/rfc1945.txt

[RFC1950] Deutsch, P., and Gailly, J-L., "ZLIB Compressed Data Format Specification version 3.3", RFC 1950, May 1996, http://www.ietf.org/rfc/rfc1950.txt

[RFC1951] Deutsch, P., "DEFLATE Compressed Data Format Specification version 1.3", RFC 1951, May 1996, http://www.ietf.org/rfc/rfc1951.txt

[RFC1960] Howes, T., "A String Representation of LDAP Search Filters", RFC 1960, June 1996, http://www.rfc-editor.org/rfc/rfc1960.txt

[RFC20] Cerf, V., "ASCII Format for Network Interchange", RFC 20, October 1969, http://www.ietf.org/rfc/rfc20.txt

[RFC2034] Freed, N., "SMTP Service Extension for Returning Enhanced Error Codes", RFC 2034, October 1996, http://www.rfc-editor.org/rfc/rfc2034.txt

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

Release: February 10, 2014

[RFC2046] Freed, N., and Borenstein, N., "Multipurpose Internet Mail Extensions (MIME) Part Two: Media Types", RFC 2046, November 1996, http://ietf.org/rfc/rfc2046.txt

[RFC2047] Moore, K., "MIME (Multipurpose Internet Mail Extensions) Part Three: Message Header Extensions for Non-ASCII Text", RFC 2047, November 1996, http://ietf.org/rfc/rfc2047.txt

[RFC2048] Freed, N., Klensin, J., and Postel, J., "Multipurpose Internet Mail Extensions (MIME) Part Four: Registration Procedures", BCP 13, RFC 2048, November 1996, http://www.rfc-editor.org/rfc/rfc2048.txt

[RFC2049] Freed, N., and Borenstein N., "Multipurpose Internet Mail Extensions (MIME) Part Five: Conformance Criteria and Examples", RFC 2049, November 1996, http://www.rfc-editor.org/rfc/rfc2049.txt

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

[RFC2068] Fielding, R., Gettys, J., Mogul, J., et al., "Hypertext Transfer Protocol -- HTTP/1.1", RFC 2068, January 1997, http://www.ietf.org/rfc/rfc2068.txt

[RFC2076] Palme, J., "Common Internet Message Headers", RFC 2076, February 1997, http://www.rfc-editor.org/rfc/rfc2076.txt

[RFC2110] Palme, J., and Hopmann, A., "MIME E-mail Encapsulation of Aggregate Documents, such as HTML (MHTML)", RFC 2110, March 1997, http://www.rfc-editor.org/rfc/rfc2110.txt

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

[RFC2156] Kille, S., "MIXER (Mime Internet X.400 Enhanced Relay): Mapping between X.400 and RFC 822/MIME", RFC 2156, January 1998, http://www.rfc-editor.org/rfc/rfc2156.txt

[RFC2183] Troost, R., Dorner, S., and Moore, K., Ed., "Communicating Presentation Information in Internet Messages: The Content-Disposition Header Field", RFC 2183, August 1997, http://www.rfc-editor.org/rfc/rfc2183.txt

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

[RFC2247] Kille, S., Wahl, M., Grimstad, A., et al., "Using Domains in LDAP/X.500 Distinguished Names", RFC 2247, January 1998, http://www.ietf.org/rfc/rfc2247.txt

[RFC2291] Slein, J., Vitali, F., Whitehead, E., et al., "Requirements for a Distributed Authoring and Versioning Protocol for the World Wide Web", RFC 2291, February 1998, http://www.ietf.org/rfc/rfc2291.txt

[RFC2311] Dusse, S., Hoffman, P., Ramsdell, B., et al., "S/MIME Version 2 Message Specification", RFC 2311, March 1998, http://www.rfc-editor.org/rfc/rfc2311.txt

[RFC2315] Kaliski, B., "PKCS #7: Cryptographic Message Syntax Version 1.5", RFC 2315, March 1998, http://www.ietf.org/rfc/rfc2315.txt

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

[RFC2369] Neufeld, G., and Baer, J., "The Use of URLs as Meta-Syntax for Core Mail List Commands and their Transport through Message Header Fields", RFC 2369, July 1998, http://www.rfc-editor.org/rfc/rfc2369.txt

[RFC2387] Levinson, E., "The MIME Multipart/Related Content-type", RFC 2387, August 1998, http://ietf.org/rfc/rfc2387.txt

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

[RFC2396] Berners-Lee, T., Fielding, R., and Masinter, L., "Uniform Resource Identifiers (URI): Generic Syntax", RFC 2396, August 1998, http://www.ietf.org/rfc/rfc2396.txt

[RFC2425] Howes, T., Smith, M., and Dawson, F., "A MIME Content-Type for Directory Information", RFC 2425, September 1998, http://www.rfc-editor.org/rfc/rfc2425.txt

[RFC2426] Dawson, F., and Howes, T., "vCard MIME Directory Profile", RFC 2426, September 1998, http://www.rfc-editor.org/rfc/rfc2426.txt

[RFC2445] Dawson, F., and Stenerson, D., "Internet Calendaring and Scheduling Core Object Specification (iCalendar)", RFC 2445, November 1998, http://www.rfc-editor.org/rfc/rfc2445.txt

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

[RFC2447] Dawson, F., Mansour, S., and Silverberg, S., "iCalendar Message-Based Interoperability Protocol (iMIP)", RFC 2447, November 1998, http://www.rfc-editor.org/rfc/rfc2447.txt

[RFC2449] Gellens, R., Newman, C., and Lundblade, L., "POP3 Extension Mechanism", RFC 2449, November 1998, http://www.rfc-editor.org/rfc/rfc2449.txt

[RFC2459] Housley, R., Ford, W., Polk, W., and Solo, D., "Internet X.509 Public Key Infrastructure Certificate and CRL Profile", RFC 2459, January 1999, http://www.ietf.org/rfc/rfc2459.txt

[RFC2518] Goland, Y., Whitehead, E., Faizi, A., et al., "HTTP Extensions for Distributed Authoring - WebDAV", RFC 2518, February 1999, http://www.ietf.org/rfc/rfc2518.txt

[RFC2554] Myers, J., "SMTP Service Extension for Authentication", RFC 2554, March, 1999, http://www.ietf.org/rfc/rfc2554.txt

[RFC2557] Palme, J., Hopmann, A., and Shelness, N., "MIME Encapsulation of Aggregate Documents, such as HTML (MHTML)", RFC 2557, March 1999, http://www.rfc-editor.org/rfc/rfc2557.txt

[RFC2616] Fielding, R., Gettys, J., Mogul, J., et al., "Hypertext Transfer Protocol -- HTTP/1.1", RFC 2616, June 1999, http://www.ietf.org/rfc/rfc2616.txt

[RFC2617] Franks, J., Hallam-Baker, P., Hostetler, J., et al., "HTTP Authentication: Basic and Digest Access Authentication", RFC 2617, June 1999, http://www.ietf.org/rfc/rfc2617.txt

[RFC2696] Weider, C., Herron, A., Anantha, A., and Howes, T., "LDAP Control Extension for Simple Paged Results Manipulation", RFC 2696, September 1999, http://www.ietf.org/rfc/rfc2696.txt

[RFC2782] Gulbrandsen, A., Vixie, P., and Esibov, L., "A DNS RR for specifying the location of services (DNS SRV)", RFC 2782, February 2000, http://www.ietf.org/rfc/rfc2782.txt

[RFC2798] Smith, M., "Definition of the inetOrgPerson LDAP Object Class", RFC 2798, April 2000, http://www.ietf.org/rfc/rfc2798.txt

[RFC2818] Rescorla, E., "HTTP Over TLS", RFC 2818, May 2000, http://www.ietf.org/rfc/rfc2818.txt

[RFC2821] Klensin, J., "Simple Mail Transfer Protocol", STD 10, RFC 2821, April 2001, http://www.ietf.org/rfc/rfc2821.txt

[RFC2822] Resnick, P., Ed., "Internet Message Format", STD 11, RFC 2822, April 2001, http://www.ietf.org/rfc/rfc2822.txt

[RFC2849] Good, G., "The LDAP Data Interchange Format (LDIF) - Technical Specification", RFC 2849, June 2000, http://www.ietf.org/rfc/rfc2849.txt

[RFC2876] Pawling, J., "Use of the KEA and SKIPJACK Algorithms in CMS", RFC 2876, July 2000, http://www.rfc-editor.org/rfc/rfc2876.txt

[RFC2891] Howes, T., Wahl, M., and Anantha, A., "LDAP Control Extension for Server Side Sorting of Search Results", RFC 2891, August 2000, http://www.ietf.org/rfc/rfc2891.txt

[RFC2920] Freed, N., "SMTP Service Extension for Command Pipelining", STD 60, RFC 2920, September 2000, http://www.rfc-editor.org/rfc/rfc2920.txt

[RFC3030] Vaudreuil, G., "SMTP Service Extensions for Transmission of Large and Binary MIME Messages", RFC 3030, December 2000, http://www.rfc-editor.org/rfc/rfc3030.txt

[RFC3066] Alvestrand, H., "Tags for the Identification of Language", RFC 3066, January 2001, http://www.ietf.org/rfc/rfc3066.txt

[RFC3174] Eastlake III, D., and Jones, P., "US Secure Hash Algorithm 1 (SHA1)", RFC 3174, September 2001, http://www.ietf.org/rfc/rfc3174.txt

[RFC3207] Hoffman, P., "SMTP Service Extension for Secure SMTP over Transport Layer Security", RFC 3207, February 2002, http://www.rfc-editor.org/rfc/rfc3207.txt

[RFC3261] Rosenberg, J., Schulzrinne, H., Camarillo, G., Johnston, A., Peterson, J., Sparks, R., Handley, M., and Schooler, E., "SIP: Session Initiation Protocol", RFC 3261, June 2002, http://www.ietf.org/rfc/rfc3261.txt

[RFC3280] Housley, R., Polk, W., Ford, W., and Solo, D., "Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile", RFC 3280, April 2002, http://www.ietf.org/rfc/rfc3280.txt

[RFC3282] Alvestrand, H., "Content Language Headers", RFC 3282, May 2002, http://www.rfc-editor.org/rfc/rfc3282.txt

[RFC3463] Vaudreuil, G., "Enhanced Mail System Status Codes", RFC 3463, January 2003, http://www.rfc-editor.org/rfc/rfc3463.txt

[RFC3464] Moore, K., and Vaudreuil, G., "An Extensible Message Format for Delivery Status Notifications", RFC 3464, January 2003, http://www.rfc-editor.org/rfc/rfc3464.txt

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

[RFC3516] Nerenberg, L., "IMAP4 Binary Content Extension", RFC 3516, April 2003, http://www.rfc-editor.org/rfc/rfc3516.txt

[RFC3629] Yergeau, F., "UTF-8, A Transformation Format of ISO 10646", STD 63, RFC 3629, November 2003, http://www.ietf.org/rfc/rfc3629.txt

[RFC3744] Clemm, G., Reschke, J., Sedlar, E., and Whitehead, J., "Web Distributed Authoring and Versioning (WebDAV) Access Control Protocol", RFC 3744, May 2004, http://www.rfc-editor.org/rfc/rfc3744.txt

[RFC3798] Hansen, T., and Vaudreuil, G., Eds., "Message Disposition Notification", RFC 3798, May 2004, http://www.rfc-editor.org/rfc/rfc3798.txt

[RFC3852] Housley, R., "Cryptographic Message Syntax (CMS)", RFC 3852, July 2004, http://www.ietf.org/rfc/rfc3852.txt

[RFC3966] Schulzrinne, H., "The tel URI for Telephone Numbers", RFC 3966, December 2004, http://www.rfc-editor.org/rfc/rfc3966.txt

[RFC3986] Berners-Lee, T., Fielding, R., and Masinter, L., "Uniform Resource Identifier (URI): Generic Syntax", STD 66, RFC 3986, January 2005, http://www.ietf.org/rfc/rfc3986.txt

[RFC4120] Neuman, C., Yu, T., Hartman, S., and Raeburn, K., "The Kerberos Network Authentication Service (V5)", RFC 4120, July 2005, http://www.ietf.org/rfc/rfc4120.txt

[RFC4121] Zhu, L., Jaganathan, K., and Hartman, S., "The Kerberos Version 5 Generic Security Service Application Program Interface (GSS-API) Mechanism: Version 2", RFC 4121, July 2005, http://www.ietf.org/rfc/rfc4121.txt

[RFC4122] Leach, P., Mealling, M., and Salz, R., "A Universally Unique Identifier (UUID) URN Namespace", RFC 4122, July 2005, http://www.ietf.org/rfc/rfc4122.txt

[RFC4210] Adams, C., Farrell, S., Kause, T., and Mononen, T., "Internet X.509 Public Key Infrastructure Certificate Management Protocol (CMP)", RFC 4210, September 2005, http://www.rfc-editor.org/rfc/rfc4210.txt

[RFC4287] Nottingham, M., and Sayre, E.R., "The Atom Syndication Format", RFC 4287, December 2005, http://www.ietf.org/rfc/rfc4287.txt

[RFC4315] Crispin, M., "Internet Message Access Protocol (IMAP) - UIDPLUS extension", RFC 4315, December 2005, http://www.rfc-editor.org/rfc/rfc4315.txt

[RFC4346] Dierks, T., and Rescorla, E., "The Transport Layer Security (TLS) Protocol Version 1.1", RFC 4346, April 2006, http://www.ietf.org/rfc/rfc4346.txt

[RFC4409] Gellens, R., and Klensin, J., "Message Submission for Mail", RFC 4409, April 2006, http://www.rfc-editor.org/rfc/rfc4409.txt

[RFC4511] Sermersheim, J., "Lightweight Directory Access Protocol (LDAP): The Protocol", RFC 4511, June 2006, http://www.rfc-editor.org/rfc/rfc4511.txt

[RFC4512] Zeilenga, K., "Lightweight Directory Access Protocol (LDAP): Directory Information Models", RFC 4512, June 2006, http://www.rfc-editor.org/rfc/rfc4512.txt

[RFC4519] Sciberras, A., Ed., "Lightweight Directory Access Protocol (LDAP): Schema for User Applications", RFC 4519, June 2006, http://www.rfc-editor.org/rfc/rfc4519.txt

[RFC4523] Zeilenga, K., "Lightweight Directory Access Protocol (LDAP) Schema Definitions for X.509 Certificates", RFC 4523, June 2006, http://www.ietf.org/rfc/rfc4523.txt

[RFC4524] Zeilenga, K., "COSINE LDAP/X.500 Schema", RFC 4524, June 2006, http://www.ietf.org/rfc/rfc4524.txt

Release: February 10, 2014

[RFC4616] Zeilenga, K., Ed., "The PLAIN Simple Authentication and Security Layer (SASL) Mechanism", RFC 4616, August 2006, http://www.rfc-editor.org/rfc/rfc4616.txt

[RFC4646] A. Phillips, Ed., and M. Davis, Ed., "Tags for Identifying Languages", BCP 47, RFC 4646, September 2006, http://www.ietf.org/rfc/rfc4646.txt

[RFC4648] Josefsson, S., "The Base16, Base32, and Base64 Data Encodings", RFC 4648, October 2006, http://www.ietf.org/rfc/rfc4648.txt

[RFC4791] Daboo, C., Desruisseaux, B., and Dusseault, L., "Calendaring Extensions to WebDAV (CalDAV)", RFC 4791, March 2007, http://www.rfc-editor.org/rfc/rfc4791.txt

[RFC4954] Siemborski, R., and Melnikov, A., Eds., "SMTP Service Extension for Authentication", RFC 4954, July 2007, http://www.rfc-editor.org/rfc/rfc4954.txt

[RFC4985] Santesson, S., "Internet X.509 Public Key Infrastructure Subject Alternative Name for Expression of Service Name", RFC 4985, August 2007, http://www.rfc-editor.org/rfc/rfc4985.txt

[RFC5234] Crocker, D., Ed., and Overell, P., "Augmented BNF for Syntax Specifications: ABNF", STD 68, RFC 5234, January 2008, http://www.rfc-editor.org/rfc/rfc5234.txt

[RFC5321] Klensin, J., "Simple Mail Transfer Protocol", RFC 5321, October 2008, http://rfc-editor.org/rfc/rfc5321.txt

[RFC5322] Resnick, P., Ed., "Internet Message Format", RFC 5322, October 2008, http://www.ietf.org/rfc/rfc5322.txt

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

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

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

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

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

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

[RFC768] Postel, J., "User Datagram Protocol", STD 6, RFC 768, August 1980, http://www.ietf.org/rfc/rfc768.txt

[RFC793] Postel, J., "Transmission Control Protocol", STD 7, RFC 793, September 1981, http://www.ietf.org/rfc/rfc0793.txt

[RFC822] Crocker, D.H., "Standard for ARPA Internet Text Messages", STD 11, RFC 822, August 1982, http://www.ietf.org/rfc/rfc0822.txt

[RFC850] Horton, M., "Standard for Interchange of USENET Messages", RFC 850, June 1983, http://www.rfc-editor.org/rfc/rfc850.txt

[RFC896] Nagle, J., "Congestion Control in IP/TCP Internetworks", RFC 896, January 1984, http://www.ietf.org/rfc/rfc896.txt

[RFC959] Postel, J., and Reynolds, J., "File Transfer Protocol (FTP)", RFC 959, October 1985, http://www.ietf.org/rfc/rfc959.txt

[RSS2.0] Winer, D., "RSS 2.0 Specification", Fall 2002, version 2.0.1: July 2003, http://cyber.law.harvard.edu/rss/rss.html

[SAML] OASIS, "Web Services Security: SAML Token Profile", Oasis Standard, December 2004, http://docs.oasis-open.org/wss/oasis-wss-saml-token-profile-1.0.pdf

[SMIL2.1] Bulterman, D., Grassel, G., Jansen, J., Koivisto, A., Layaida, N., et al., Eds., "Synchronized Multimedia Integration Language", W3C Recommendation, December, 2005, http://www.w3.org/TR/SMIL2/

[SOAP1.1] Box, D., Ehnebuske, D., Kakivaya, G., et al., "Simple Object Access Protocol (SOAP) 1.1", May 2000, http://www.w3.org/TR/2000/NOTE-SOAP-20000508/

[SOAP1.2/1] Gudgin, M., Hadley, M., Mendelsohn, N., Moreau, J., and Nielsen, H.F., "SOAP Version 1.2 Part 1: Messaging Framework", W3C Recommendation, June 2003, http://www.w3.org/TR/2003/REC-soap12-part1-20030624

[UASDC] Ziv, J. and Lempel, A., "A Universal Algorithm for Sequential Data Compression", May 1977, http://ieeexplore.ieee.org/iel5/18/22696/01055714.pdf

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

[W3C-XMLNote] Layman, A., Jung, E., Maler, E., et al., "XML-Data", W3C Note, January 1998, http://www.w3.org/TR/1998/NOTE-XML-data-0105

[WAVE] IBM Corporation and Microsoft Corporation, "Multimedia Programming Interface and Data Specifications 1.0", August 1991, http://www-mmsp.ece.mcgill.ca/Documents/AudioFormats/WAVE/Docs/riffmci.pdf

[WBXML1.2] Martin, B., and Jano, B., Eds., "WAP Binary XML Content Format", W3C Note, June 1999, http://www.w3.org/1999/06/NOTE-wbxml-19990624

[WSA10] W3C, "WS-Addressing 1.0 Namespace: http://www.w3.org/2005/08/addressing", http://www.w3.org/2005/08/addressing/

[WSADDRBIND] Gudgin, M., Hadley, M., and Rogers, T., Eds., "Web Services Addressing 1.0 – SOAP Binding", W3C Recommendation, May 2006, http://www.w3.org/TR/2006/REC-ws-addr-soap-20060509/

[WSADDRCORE] Gudgin, M., Hadley, M., and Rogers, T., Eds., "Web Services Addressing 1.0 - Core", W3C Recommendation, May 2006, http://www.w3.org/TR/2006/REC-ws-addr-core-20060509/

[WSAddressing] Box, D., Christensen, E., Ferguson, D., et al., "Web Services Addressing (WS-Addressing)", August 2004, http://www.w3.org/Submission/ws-addressing/

[WSADDR-Metadata] Gudgin, M., Hadley, M., Rogers, T., and Yalçinalp, Ü., Eds., "Web Services Addressing 1.0 - Metadata", W3C Recommendation, September 2007, http://www.w3.org/TR/2007/REC-ws-addr-metadata-20070904/

Release: February 10, 2014

[WSDL] Christensen, E., Curbera, F., Meredith, G., and Weerawarana, S., "Web Services Description Language (WSDL) 1.1", W3C Note, March 2001, http://www.w3.org/TR/2001/NOTE-wsdl-20010315

[WSDLSOAP] Angelov, D., Ballinger, K., Butek, R., et al., "WSDL 1.1 Binding Extension for SOAP 1.2", W3c Member Submission, April 2006, http://www.w3.org/Submission/wsdl11soap12/

[WSFederation] Kaler, C., Nadalin, A., Bajaj, S., et al., "Web Services Federation Language (WS-Federation)", Version 1.1, December 2006, http://specs.xmlsoap.org/ws/2006/12/federation/ws-federation.pdf

[WSIBASIC] Ballinger, K., Ehnebuske, D., Gudgin, M., et al., Eds., "Basic Profile Version 1.0", Final Material, April 2004, http://www.ws-i.org/Profiles/BasicProfile-1.0-2004-04-16.html

[WS-MetadataExchangeDir] BEA Systems, Computer Associates, IBM, Microsoft, SAP, Sun, and webMethods, "Web Services Metadata Exchange (WS-MetadataExchange)", August 2006, http://schemas.xmlsoap.org/ws/2004/09/mex/

[WSPOLICY] Bajaj, S., Box, D., Chappell, D., et al., "Web Services Policy Framework (WS-POLICY) and Web Services Policy Attachment (WS-PolicyAttachment)", March 2006, http://schemas.xmlsoap.org/ws/2004/09/policy

[WSS] OASIS, "Web Services Security: SOAP Message Security 1.1 (WS-Security 2004)", February 2006, http://www.oasis-open.org/committees/download.php/16790/wss-v1.1-spec-os-SOAPMessageSecurity.pdf

[WSTrust1.4] OASIS Standard, "WS-Trust 1.4", February 2009, http://docs.oasis-open.org/ws-sx/ws-trust/v1.4/os/ws-trust-1.4-spec-os.doc

[X25] ITU-T, "X25: Interface between Data Terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) for terminals operating in the packet mode and connected to public data networks by dedicated circuit", ITU-T Recommendation X.25, October 1996, http://www.itu.int/rec/T-REC-X.25-199610-I/en

[X520] ITU-T, "X.520: Information technology - Open Systems Interconnection - The Directory: Selected attribute types", ITU-T Recommendation X.520, August 2005, http://www.itu.int/rec/T-REC-X.520/en

[XML] World Wide Web Consortium, "Extensible Markup Language (XML) 1.0 (Fourth Edition)", W3C Recommendation, August 2006, http://www.w3.org/TR/2006/REC-xml-20060816/

[XML10] World Wide Web Consortium, "Extensible Markup Language (XML) 1.0 (Third Edition)", February 2004, http://www.w3.org/TR/2004/REC-xml-20040204/

[XMLBase] Marsh, J., and Tobin, R., Eds., "XML Base (Second Edition)", W3C Recommendation, January 2009, http://www.w3.org/TR/2009/REC-xmlbase-20090128/

[XMLDSig2] Bartel, M., Boyer, J., Fox, B., et al., "XML Signature Syntax and Processing (Second Edition)", W3C Recommendation, June 2008, http://www.w3.org/TR/2008/REC-xmldsig-core-20080610/

[XMLENC] Imamura, T., Dillaway, B., and Simon, E., "XML Encryption Syntax and Processing", W3C Recommendation, December 2002, http://www.w3.org/TR/2002/REC-xmlenc-core-20021210/

[XMLNS] Bray, T., Hollander, D., Layman, A., et al., Eds., "Namespaces in XML 1.0 (Third Edition)", W3C Recommendation, December 2009, http://www.w3.org/TR/2009/REC-xml-names-20091208/

[XMLSCHEMA0] Fallside, D., and Walmsley, P., Eds., "XML Schema Part 0: Primer, Second Edition", W3C Recommendation, October 2004, http://www.w3.org/TR/2004/REC-xmlschema-0-20041028/

[XMLSCHEMA1/2] Thompson, H.S., Beech, D., Maloney, M., and Mendelsohn, N., Eds., "XML Schema Part 1: Structures Second Edition", W3C Recommendation, October 2004, http://www.w3.org/TR/2004/REC-xmlschema-1-20041028/

[XMLSCHEMA1] Thompson, H.S., Beech, D., Maloney, M., and Mendelsohn, N., Eds., "XML Schema Part 1: Structures", W3C Recommendation, May 2001, http://www.w3.org/TR/2001/REC-xmlschema-1-20010502/

[XMLSCHEMA2/2] Biron, P.V., and Malhotra, A., Eds., "XML Schema Part 2: Datatypes Second Edition", W3C Recommendation, October 2004, http://www.w3.org/TR/2004/REC-xmlschema-2-20041028/

[XMLSCHEMA2] Biron, P.V., and Malhotra, A., Eds., "XML Schema Part 2: Datatypes", W3C Recommendation, May 2001, http://www.w3.org/TR/2001/REC-xmlschema-2-20010502/

[XPATH] Clark, J. and DeRose, S., "XML Path Language (XPath), Version 1.0", W3C Recommendation, November 1999, http://www.w3.org/TR/xpath

Release: February 10, 2014

3   Internal References

[MS-ADA1] Microsoft Corporation, "Active Directory Schema Attributes A-L".

[MS-ADA3] Microsoft Corporation, "Active Directory Schema Attributes N-Z".

[MS-ADTS] Microsoft Corporation, "Active Directory Technical Specification".

[MS-ASAIRS] Microsoft Corporation, "Exchange ActiveSync: AirSyncBase Namespace Protocol".

[MS-ASCAL] Microsoft Corporation, "Exchange ActiveSync: Calendar Class Protocol".

[MS-ASCMD] Microsoft Corporation, "Exchange ActiveSync: Command Reference Protocol".

[MS-ASCNTC] Microsoft Corporation, "Exchange ActiveSync: Contact Class Protocol".

[MS-ASCON] Microsoft Corporation, "Exchange ActiveSync: Conversations Protocol".

[MS-ASDOC] Microsoft Corporation, "Exchange ActiveSync: Document Class Protocol".

[MS-ASDTYPE] Microsoft Corporation, "Exchange ActiveSync: Data Types".

[MS-ASEMAIL] Microsoft Corporation, "Exchange ActiveSync: Email Class Protocol".

[MS-ASHTTP] Microsoft Corporation, "Exchange ActiveSync: HTTP Protocol".

[MS-ASMS] Microsoft Corporation, "Exchange ActiveSync: Short Message Service (SMS) Protocol".

[MS-ASNOTE] Microsoft Corporation, "Exchange ActiveSync: Notes Class Protocol".

[MS-ASPROV] Microsoft Corporation, "Exchange ActiveSync: Provisioning Protocol".

[MS-ASRM] Microsoft Corporation, "Exchange ActiveSync: Rights Management Protocol".

[MS-ASTASK] Microsoft Corporation, "Exchange ActiveSync: Tasks Class Protocol".

[MS-ASWBXML] Microsoft Corporation, "Exchange ActiveSync: WAP Binary XML (WBXML) Algorithm".

[MS-CFB] Microsoft Corporation, "Compound File Binary File Format".

[MS-DTYP] Microsoft Corporation, "Windows Data Types".

[MS-ERREF] Microsoft Corporation, "Windows Error Codes".

[MS-GLOS] Microsoft Corporation, "Windows Protocols Master Glossary".

[MS-GRVDYNM] Microsoft Corporation, "Groove Dynamics Protocol".

[MS-IPFFX] Microsoft Corporation, "InfoPath Form File Format".

[MS-KILE] Microsoft Corporation, "Kerberos Protocol Extensions".

[MS-LCID] Microsoft Corporation, "Windows Language Code Identifier (LCID) Reference".

[MS-MCI] Microsoft Corporation, "Microsoft ZIP (MSZIP) Compression and Decompression Data Structure".

[MS-MEETS] Microsoft Corporation, "Meetings Web Services Protocol".

[MS-NLMP] Microsoft Corporation, "NT LAN Manager (NTLM) Authentication Protocol".

[MS-NSPI] Microsoft Corporation, "Name Service Provider Interface (NSPI) Protocol".

[MS-OAUT] Microsoft Corporation, "OLE Automation Protocol".

[MS-OAUTH2EX] Microsoft Corporation, "OAuth 2.0 Authentication Protocol Extensions".

[MS-OCAUTHWS] Microsoft Corporation, "OC Authentication Web Service Protocol".

[MS-ODATA] Microsoft Corporation, "Open Data Protocol (OData)".

[MS-OFCGLOS] Microsoft Corporation, "Microsoft Office Master Glossary".

[MS-OFFCRYPTO] Microsoft Corporation, "Office Document Cryptography Structure".

[MS-OWEMXML] Microsoft Corporation, "Office Web Extensibility Manifest Format".

[MS-OWEXML] Microsoft Corporation, "Office Web Extensibility Extensions to Office Open XML Structure Specification".

[MS-OXABREF] Microsoft Corporation, "Address Book Name Service Provider Interface (NSPI) Referral Protocol".

[MS-OXBBODY] Microsoft Corporation, "Best Body Retrieval Algorithm".

[MS-OXCDATA] Microsoft Corporation, "Data Structures".

[MS-OXCEXT] Microsoft Corporation, "Client Extension Message Object Protocol".

[MS-OXCFOLD] Microsoft Corporation, "Folder Object Protocol".

[MS-OXCFXICS] Microsoft Corporation, "Bulk Data Transfer Protocol".

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

[MS-OXCMAIL] Microsoft Corporation, "RFC 2822 and MIME to Email Object Conversion Algorithm".

[MS-OXCMAPIHTTP] Microsoft Corporation, "Messaging Application Programming Interface (MAPI) Extensions for HTTP".

[MS-OXCMSG] Microsoft Corporation, "Message and Attachment Object Protocol".

[MS-OXCNOTIF] Microsoft Corporation, "Core Notifications Protocol".

[MS-OXCPERM] Microsoft Corporation, "Exchange Access and Operation Permissions Protocol".

[MS-OXCPRPT] Microsoft Corporation, "Property and Stream Object Protocol".

[MS-OXCROPS] Microsoft Corporation, "Remote Operations (ROP) List and Encoding Protocol".

[MS-OXCRPC] Microsoft Corporation, "Wire Format Protocol".

[MS-OXCSPAM] Microsoft Corporation, "Spam Confidence Level Protocol".

[MS-OXCSTOR] Microsoft Corporation, "Store Object Protocol".

[MS-OXCTABL] Microsoft Corporation, "Table Object Protocol".

[MS-OXDISCO] Microsoft Corporation, "Autodiscover HTTP Service Protocol".

[MS-OXDSCLI] Microsoft Corporation, "Autodiscover Publishing and Lookup Protocol".

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

[MS-OXIMAP4] Microsoft Corporation, "Internet Message Access Protocol Version 4 (IMAP4) Extensions".

[MS-OXLDAP] Microsoft Corporation, "Lightweight Directory Access Protocol (LDAP) Version 3 Extensions".

[MS-OXMSG] Microsoft Corporation, "Outlook Item (.msg) File Format".

[MS-OXNSPI] Microsoft Corporation, "Exchange Server Name Service Provider Interface (NSPI) Protocol".

[MS-OXOAB] Microsoft Corporation, "Offline Address Book (OAB) File Format and Schema".

[MS-OXOABK] Microsoft Corporation, "Address Book Object Protocol".

[MS-OXOABKT] Microsoft Corporation, "Address Book User Interface Templates Protocol".

[MS-OXOCAL] Microsoft Corporation, "Appointment and Meeting Object Protocol".

[MS-OXOCFG] Microsoft Corporation, "Configuration Information Protocol".

[MS-OXOCNTC] Microsoft Corporation, "Contact Object Protocol".

[MS-OXODLGT] Microsoft Corporation, "Delegate Access Configuration Protocol".

[MS-OXODOC] Microsoft Corporation, "Document Object Protocol".

[MS-OXOFLAG] Microsoft Corporation, "Informational Flagging Protocol".

[MS-OXOJRNL] Microsoft Corporation, "Journal Object Protocol".

[MS-OXOMSG] Microsoft Corporation, "Email Object Protocol".

[MS-OXONOTE] Microsoft Corporation, "Note Object Protocol".

[MS-OXOPFFB] Microsoft Corporation, "Public Folder-Based Free/Busy Protocol".

[MS-OXOPOST] Microsoft Corporation, "Post Object Protocol".

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

[MS-OXORMMS] Microsoft Corporation, "Rights-Managed Email Object Protocol".

[MS-OXORSS] Microsoft Corporation, "RSS Object Protocol".

[MS-OXORULE] Microsoft Corporation, "Email Rules Protocol".

[MS-OXOSFLD] Microsoft Corporation, "Special Folders Protocol".

[MS-OXOSMIME] Microsoft Corporation, "S/MIME Email Object Algorithm".

[MS-OXOSMMS] Microsoft Corporation, "Short Message Service (SMS) and Multimedia Messaging Service (MMS) Object Protocol".

[MS-OXOSRCH] Microsoft Corporation, "Search Folder List Configuration Protocol".

[MS-OXOTASK] Microsoft Corporation, "Task-Related Objects Protocol".

[MS-OXOUM] Microsoft Corporation, "Voice Mail and Fax Objects Protocol".

[MS-OXPFOAB] Microsoft Corporation, "Offline Address Book (OAB) Public Folder Retrieval Protocol".

[MS-OXPHISH] Microsoft Corporation, "Phishing Warning Protocol".

[MS-OXPOP3] Microsoft Corporation, "Post Office Protocol Version 3 (POP3) Extensions".

[MS-OXPROPS] Microsoft Corporation, "Exchange Server Protocols Master Property List".

[MS-OXPROTO] Microsoft Corporation, "Exchange Server Protocols System Overview".

[MS-OXPSVAL] Microsoft Corporation, "Email Postmark Validation Algorithm".

[MS-OXREF] Microsoft Corporation, "Exchange Server Protocols Master Reference".

[MS-OXRTFCP] Microsoft Corporation, "Rich Text Format (RTF) Compression Algorithm".

[MS-OXRTFEX] Microsoft Corporation, "Rich Text Format (RTF) Extensions Algorithm".

[MS-OXSHARE] Microsoft Corporation, "Sharing Message Object Protocol".

[MS-OXSHRMSG] Microsoft Corporation, "Sharing Message Attachment Schema".

[MS-OXSMTP] Microsoft Corporation, "Simple Mail Transfer Protocol (SMTP) Extensions".

[MS-OXTNEF] Microsoft Corporation, "Transport Neutral Encapsulation Format (TNEF) Data Algorithm".

[MS-OXVCARD] Microsoft Corporation, "vCard to Contact Object Conversion Algorithm".

[MS-OXWAVLS] Microsoft Corporation, "Availability Web Service Protocol".

[MS-OXWCONFIG] Microsoft Corporation, "Web Service Configuration Protocol".

[MS-OXWMT] Microsoft Corporation, "Mail Tips Web Service Extensions".

[MS-OXWOAB] Microsoft Corporation, "Offline Address Book (OAB) Retrieval File Format".

[MS-OXWOOF] Microsoft Corporation, "Out of Office (OOF) Web Service Protocol".

[MS-OXWSADISC] Microsoft Corporation, "Autodiscover Publishing and Lookup SOAP-Based Web Service Protocol".

[MS-OXWSARCH] Microsoft Corporation, "Archiving Web Service Protocol".

[MS-OXWSATT] Microsoft Corporation, "Attachment Handling Web Service Protocol".

[MS-OXWSBTRF] Microsoft Corporation, "Bulk Transfer Web Service Protocol".

[MS-OXWSCDATA] Microsoft Corporation, "Common Web Service Data Types".

[MS-OXWSCEXT] Microsoft Corporation, "Client Extension Web Service Protocol".

[MS-OXWSCONT] Microsoft Corporation, "Contacts Web Service Protocol".

[MS-OXWSCONV] Microsoft Corporation, "Conversations Web Service Protocol".

[MS-OXWSCORE] Microsoft Corporation, "Core Items Web Service Protocol".

[MS-OXWSCOS] Microsoft Corporation, "Unified Contact Store Web Service Protocol".

[MS-OXWSCVTID] Microsoft Corporation, "Convert Item Identifier Web Service Protocol".

[MS-OXWSDLGM] Microsoft Corporation, "Delegate Access Management Web Service Protocol".

[MS-OXWSDLIST] Microsoft Corporation, "Distribution List Creation and Usage Web Service Protocol".

[MS-OXWSEDISC] Microsoft Corporation, "Electronic Discovery (eDiscovery) Web Service Protocol".

[MS-OXWSFOLD] Microsoft Corporation, "Folders and Folder Permissions Web Service Protocol".

[MS-OXWSGNI] Microsoft Corporation, "Nonindexable Item Web Service Protocol".

[MS-OXWSGTRM] Microsoft Corporation, "Get Rooms List Web Service Protocol".

[MS-OXWSGTZ] Microsoft Corporation, "Get Server Time Zone Web Service Protocol".

[MS-OXWSLVID] Microsoft Corporation, "Federated Internet Authentication Web Service Protocol".

[MS-OXWSMSG] Microsoft Corporation, "Email Message Types Web Service Protocol".

[MS-OXWSMSHR] Microsoft Corporation, "Folder Sharing Web Service Protocol".

[MS-OXWSMTGS] Microsoft Corporation, "Calendaring Web Service Protocol".

[MS-OXWSMTRK] Microsoft Corporation, "Message Tracking Web Service Protocol".

[MS-OXWSNTIF] Microsoft Corporation, "Notifications Web Service Protocol".

[MS-OXWSPED] Microsoft Corporation, "Password Expiration Date Web Service Protocol".

[MS-OXWSPERS] Microsoft Corporation, "Persona Web Service Protocol".

[MS-OXWSPHOTO] Microsoft Corporation, "Photo Web Service Protocol".

[MS-OXWSPOST] Microsoft Corporation, "Post Items Web Service Protocol".

[MS-OXWSPSNTIF] Microsoft Corporation, "Push Notifications Web Service Protocol".

[MS-OXWSRSLNM] Microsoft Corporation, "Resolve Recipient Names Web Service Protocol".

[MS-OXWSRULES] Microsoft Corporation, "Inbox Rules Web Service Protocol".

[MS-OXWSSMBX] Microsoft Corporation, "Site Mailbox Web Service Protocol".

[MS-OXWSSRCH] Microsoft Corporation, "Mailbox Search Web Service Protocol".

[MS-OXWSSYNC] Microsoft Corporation, "Mailbox Contents Synchronization Web Service Protocol".

[MS-OXWSTASK] Microsoft Corporation, "Tasks Web Service Protocol".

[MS-OXWSURPT] Microsoft Corporation, "Retention Tag Web Service Protocol".

[MS-OXWSUSRCFG] Microsoft Corporation, "User Configuration Web Service Protocol".

[MS-OXWSXPROP] Microsoft Corporation, "Extended Properties Structure".

[MS-OXWUMS] Microsoft Corporation, "Voice Mail Settings Web Service Protocol".

[MS-PATCH] Microsoft Corporation, "LZX DELTA Compression and Decompression".

[MS-RMPR] Microsoft Corporation, "Rights Management Services (RMS): Client-to-Server Protocol".

[MS-RPCE] Microsoft Corporation, "Remote Procedure Call Protocol Extensions".

[MS-RPCH] Microsoft Corporation, "Remote Procedure Call over HTTP Protocol".

[MS-SAMR] Microsoft Corporation, "Security Account Manager (SAM) Remote Protocol (Client-to-Server)".

[MS-SIPRE] Microsoft Corporation, "Session Initiation Protocol (SIP) Routing Extensions".

[MS-SMTPNTLM] Microsoft Corporation, "NT LAN Manager (NTLM) Authentication: Simple Mail Transfer Protocol (SMTP) Extension".

[MS-SPS2SAUTH] Microsoft Corporation, "OAuth 2.0 Authentication Protocol: SharePoint Profile".

[MS-SPSTWS] Microsoft Corporation, "SharePoint Security Token Service Web Service Protocol".

[MS-STANOICAL] Microsoft Corporation, "Outlook iCalendar Standards Support".

[MS-STANOIMAP] Microsoft Corporation, "Outlook Internet Message Access Protocol (IMAP) Standards Support".

[MS-STANOPOP3] Microsoft Corporation, "Outlook Post Office Protocol Version 3 (POP3) Standards Support".

[MS-STANXICAL] Microsoft Corporation, "Exchange iCalendar Standards Support".

[MS-STANXIMAP] Microsoft Corporation, "Exchange Internet Message Access Protocol (IMAP) Standards Support".

[MS-STANXPOP3] Microsoft Corporation, "Exchange Post Office Protocol Version 3 (POP3) Standards Support".

[MS-UCODEREF] Microsoft Corporation, "Windows Protocols Unicode Reference".

[MS-WDV] Microsoft Corporation, "Web Distributed Authoring and Versioning (WebDAV) Protocol: Client Extensions".

[MS-WDVME] Microsoft Corporation, "Web Distributed Authoring and Versioning (WebDAV) Protocol: Microsoft Extensions".

[MS-WDVSE] Microsoft Corporation, "Web Distributed Authoring and Versioning (WebDAV) Protocol: Server Extensions".

[MS-WMF] Microsoft Corporation, "Windows Metafile Format".

[MS-XJRNL] Microsoft Corporation, "Journal Record Message File Format".

[MS-XLOGIN] Microsoft Corporation, "Simple Mail Transfer Protocol (SMTP) AUTH LOGIN Extension".

[MS-XOAUTH] Microsoft Corporation, "OAuth 2.0 Authorization Protocol Extensions".

[MS-XWDCAL] Microsoft Corporation, "Web Distributed Authoring and Versioning (WebDAV) Extensions for Calendar Support".

[MS-XWDVSEC] Microsoft Corporation, "Web Distributed Authoring and Versioning (WebDAV) Protocol Security Descriptor Extensions".

4   Change Tracking

This section identifies changes that were made to the [MS-OXREF] protocol document between the November 2013 and February 2014 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.

- The removal of a document from the documentation set.

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 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 changes were introduced. Minor editorial and formatting changes may have been made, but the technical content of the document is identical to the last released version.

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.

- 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 dochelp@microsoft.com.

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
1 Support	Removed an outdated link.	N	Content updated.
2 External References	Removed an outdated note.	N	Content updated.
2 External References	Removed the reference [CSS-LEVEL1].	Y	Content removed.
2 External References	Removed the reference [RFC5023].	Y	Content removed.
2 External References	Removed the reference [RFC4627].	Y	Content removed.
2 External References	Removed the reference [RFC4918].	Y	Content removed.
2 External References	Removed the reference [RFC3977].	Y	Content removed.