

PATENT LICENSE

MICROSOFT WINDOWS SERVER 2008 PROTOCOLS

This **Patent License** (the "**Agreement**") is entered into between Microsoft Licensing GP, a Nevada general partnership, having a principal place of business at 6100 Neil Road, Suite 210, Reno, Nevada 89511-1137 ("**Microsoft**"), and the person or company identified below ("**Licensee**"), effective as of the date it has been signed on behalf of both parties (the "**Effective Date**").

Licensee Full Legal Name: Type of Legal Entity (corporation, partnership, sole proprietorship or other): State/Province Organized: Street Address: City, State & Country: Licensee Contact Name: Phone Number: Fax Number:

LICENSEE

MICROSOFT LICENSING GP

By

By

Name, Title

Name, Title

Date

Date

- 1. **Definitions.** Capitalized terms used in this Agreement are defined in this **Section 1** or elsewhere in this Agreement.
 - 1.1. "**Affiliate**" means, with respect to any party, any entity that directly or indirectly controls, is controlled by or is under common control with such party. For purposes of this definition, "control" means direct or indirect (through any number of successive tiers) ownership of: (a) more than fifty percent (50%) of the outstanding shares having the right to vote for the election of directors or other managing authority of the subject entity; or (b) in the case of an entity which does not have outstanding shares (e.g. a partnership, joint venture or unincorporated association), more than fifty percent (50%) of the ownership interests having the right to make decisions for the subject entity.
 - 1.2. "**Copy**" of a Product means each individual copy of the Product, including all copies that a Customer or Provider is authorized to make under the terms of the agreement under which that Product is Provided, and further including any concurrently running instances of the Product that the Customer is authorized to deploy.
 - 1.3. "**Customer**" means a third party (whether an individual or an entity) that receives a Product for its own use and not for sublicense or further Provision.
 - 1.4. "**Implementation(s)**" means those portion(s) of software developed by or for Licensee that implement Protocols in accordance with the Technical Documentation in order to interoperate with Microsoft Windows Server 2008.
 - 1.5. "**Necessary Claims**" means the claims of a patent or patent application that Microsoft owns or has the right to sublicense without a fee and that are necessarily infringed by implementing the Protocols in accordance with the Technical Documentation in order to interoperate with Microsoft Windows Server 2008. Necessary Claims do not include any claims directed to any technology other than an Implementation; without limiting the foregoing, Necessary Claims do not include any claims directed to (a) underlying or enabling technology that may be used or Provided in connection with a Protocol or an Implementation, (b) any portions of a Product other than the Implementation;

or (c) any implementation of technical documentation, specifications or technologies that are merely referred to in the body of the Technical Documentation.

- 1.6. **“Net Revenues”** means, for each Product: (a) all revenues actually recognized by Licensee in the normal course of business from (1) the Provision of the Product, and (2) any installation, support, maintenance, or similar agreements for services that are contractually required in connection with the Provision of the Product, including in each such case the fair market value of any non-monetary consideration; less (b) any Credits. **“Credits”** means (a) freight, postage, insurance and shipping and handling expenses applicable to the Product (but only, in each instance, if separately priced and identified in the applicable invoices or other agreements); (b) credits, rebates or refunds actually allowed for returns or recalls of the Product; and (c) sales, value-added, excise taxes, tariffs and duties, and other taxes directly related to the Provision of the Product, to the extent that the items described in (a), (b) and (c) are included in the gross invoice price and actually incurred by Licensee. Credits do not include taxes assessed against the income derived from Provision of Products or against Licensee’s business operations.
- 1.7. **“Protocols”** means the software communications protocols listed in Exhibit A, together with any additional protocols that are listed on the following website (or its successor) and are designated as “Microsoft Windows Server 2008 Protocols”:
<http://msdn2.microsoft.com/en-us/library/cc203350.aspx>
- 1.8. **“Provide”** means selling, offering for sale, importing, licensing, distributing, providing online access to (including under subscriptions or user-based connection fees), hosting, or otherwise making available in any manner to a third party. **“Provider”** means any entity that Licensee authorizes to Provide a Product in accordance with the terms of this Agreement.
- 1.9. **“Royalties”** means the royalties owed under this Agreement, as described in **Section 3** below.
- 1.10. **“Technical Documentation”** means the Microsoft technical documentation for the Protocols located at the following website: <http://msdn2.microsoft.com/en-us/library/cc203350.aspx>
- 1.11. **“User”** means an individual human being that is authorized to access a Product or to otherwise make use of a Product.

2. License

- 2.1. License Grant. Microsoft, on behalf of itself and its Affiliates, grants Licensee a worldwide, non-exclusive, personal license under the Necessary Claims to make, use, and Provide Implementations. This license grant is conditioned on Licensee’s payment of Royalties (including prepaid royalties) and Licensee’s and its Providers’ compliance with **Section 2.2**. Licensee may only Provide Implementations as part of products or services Provided under a Licensee Brand (**“Product”**); notwithstanding the foregoing, this Agreement does not grant any licenses under any patents or patent applications with respect to the portions of the Product that do not constitute the Implementation.
- 2.2. Notice. Licensee will ensure that all recipients of source code copies of Products agree to and are bound to the following terms as part of their agreement covering their use of the Product: “This source code may be covered by patents owned by Microsoft Corporation. You are not licensed under any Microsoft patents to distribute this code in any form unless you have obtained an appropriate license from Microsoft. The terms and conditions of such license may be obtained by contacting Microsoft at protocol@microsoft.com.”
- 2.3. Reservation of Rights. All rights not expressly granted in this Agreement are reserved by Microsoft. No additional rights other than under the Necessary Claims are granted by implication, exhaustion, estoppel or otherwise. Licensee will not claim licenses or other rights under any patents or applications of Microsoft or its Affiliates other than the Necessary Claims as a result of entering into this Agreement or making, using, or Providing any Implementation under this Agreement.
- 2.4. Most Favored Terms. If any other third party enters into a patent license specifically for the Protocols that contains terms that are more advantageous to that third party than the terms of this Agreement, Licensee will have the opportunity to enter into the same agreement as that third party.

If that third party agreement provides for lower Royalties than this Agreement, Licensee will receive a credit against future Royalties owed under this Agreement, consisting of the difference between the amount that Licensee paid under this Agreement for the relevant time period and the amount that Licensee would have owed under the other agreement for that time period.

3. Royalties

3.1. Prepaid Royalties. Licensee will pay Microsoft \$10,000 in non-refundable prepaid royalties, to be credited against Royalties.

3.2. Royalties. Licensee will pay Royalties for each Product containing an Implementation consisting of the Net Revenues for that Product multiplied by the Royalty Rate set forth below, provided that the Royalty per User of that Product or Provided Copy of that Product will not be less than the Minimum Royalty set forth below for the applicable Product Type:

<u>Product Type</u>	<u>Royalty Rate</u>	<u>Minimum Royalty</u>
Client – Software Product that runs on a desktop, laptop, or similar computer and is designed and used to provide computing or data services to a single User or computer	1%	\$1.87 per Copy of the Product
Server – Software Product that is designed or used to provide computing or data services to multiple Users or software programs running on multiple other computers	1%	\$23.16 per Copy of the Product
Service – Product that is Provided to Customers only in the form of a service, i.e., no software or hardware is transferred to the Customer	1%	\$0.10 per unique User of the Service per Quarter
Device – Products that consist of combinations of hardware and software intended for use by a single User, such as mobile phones and personal digital assistants	1%	\$0.34 per Copy of the Product
Other – any Product not specifically described above	1%	\$46.32 per Copy of the Product

(a) Evaluation Copy Pricing. No Royalties are owed for Copies of a Product that Licensee permits to be used under a written agreement only for a reasonably limited time period and only for testing and evaluation purposes.

(b) Locked Copies. If Licensee Provides a Copy of a Product using a commercially reasonable form of anti-piracy activation technology such that the Copy cannot be used or installed by a Customer without the use of an associated authorized digital license key, and Provides the Copy under an agreement that permits initial use or installation of the Copy only by means of the key, then Licensee will not be required to treat the Copy as having been “Provided” until Licensee or a Provider first makes the key available to the Customer.

3.3. Reporting and Payments.

(a) Licensee will pay Royalties on a quarterly basis for Provision in the prior full or partial calendar quarter (“**Quarter**”). Licensee will submit Royalty Reports within 30 days after the end of each Quarter to the address specified in **Section 8.1**, with a copy by e-mail to ipnotice@microsoft.com, using a form to be provided by Microsoft. Microsoft will in no event be entitled to obtain any information concerning: (a) the identity of any Provider or Customer of Licensee; or (b) the quantity of Implementations or Products Provided to any particular Provider or Customer of Licensee, except as may be required to determine the total quantity of Copies of Products subject to Royalties under this **Section 3**.

(b) Microsoft will invoice Licensee for the Royalties owed based on Licensee’s Royalty Reports. Licensee will pay all invoices issued by Microsoft under this Agreement within 30 days to an account specified by Microsoft. All payments due under this Agreement are payable in United

States Dollars. If Licensee receives or makes payments of any amounts that are part of Net Revenues in a currency other than U.S. Dollars, Licensee will calculate Royalties as if such payments were converted to U.S. Dollars at the end of the Quarter in which the payments were received or paid. Licensee will use the applicable currency exchange rate quoted in the *Wall Street Journal* as of 3 pm EST for currency trading among banks in amounts of \$1,000,000 or more on the last day of the applicable Quarter. Microsoft may assess and Licensee will then pay the lesser of (a) a one and one-half percent (1.5%) monthly charge, and (b) the highest amount permitted by applicable law with respect to late charges, on all amounts that are past due from the date due through and including the date Microsoft receives payment in full.

3.4. Taxes. This **Section 3.4** governs the treatment of all taxes arising as a result of or in connection with this Agreement, notwithstanding any other provision of this Agreement.

- (a) Licensee is responsible for the billing, collecting and remitting of sales, use, value added, and other comparable taxes due with respect to the collection of any revenues by Licensee, or any portion thereof. Microsoft is not liable for any taxes (including any penalties or interest thereon), that Licensee is legally obligated to pay and that are incurred by Licensee in connection with this Agreement or any Licensee revenues related to the Provision of any Implementation or Product, and Licensee takes full responsibility for all such taxes. Licensee is not liable for any income taxes that Microsoft is legally obligated to pay with respect to any amounts paid to Microsoft by Licensee under this Agreement.
- (b) Amounts payable to Microsoft under this Agreement exclude any taxes, duties, levies, fees, excises or tariffs imposed on any of Licensee's activities in connection with this Agreement. Licensee will pay to Microsoft any applicable taxes that are owed by Licensee solely as a result of entering into this Agreement and which are permitted to be collected from Licensee by Microsoft under applicable law, except to the extent Licensee provides to Microsoft a valid exemption certificate for such taxes. Licensee agrees to indemnify, defend and hold Microsoft harmless from any taxes (including without limitation sales or use taxes paid by Licensee to Microsoft) or claims, causes of action, costs (including without limitation reasonable attorneys' fees) and any other liabilities of any nature whatsoever related to such taxes.
- (c) If, after a determination by foreign tax authorities, any taxes are required to be withheld on payments made by Licensee to Microsoft, Licensee may deduct such taxes from the amount owed Microsoft and pay them to the appropriate taxing authority; provided however, that Licensee will promptly secure and deliver to Microsoft an official receipt for any such taxes withheld or other documents necessary to enable Microsoft to claim a U.S. Foreign Tax Credit. Licensee will make certain that any taxes withheld are minimized to the extent possible under applicable law.

3.5. Recordkeeping and Audits.

- (a) Recordkeeping. Licensee will maintain accurate and adequate books and records related to its compliance with all terms and conditions of this Agreement (collectively, "**Audit Information**") until the date that is two years from the end of the last Quarter in which Licensee Provides Implementations.
- (b) Audits. Licensee will provide access to Audit Information to a nationally recognized independent certified public accountant ("**Auditor**") selected by Microsoft and approved by Licensee (such approval not to be unreasonably delayed or withheld), for purposes of conducting an audit of Licensees' compliance with the terms and conditions of this Agreement. Licensee must be given at least 30 days notice of any audit and the access will be limited to those portions of the Audit Information necessary to verify Licensee's compliance with this Agreement. The Auditor will use reasonable and customary care to protect the confidentiality of Audit Information. Audits will be conducted during regular business hours at Licensee's facilities. The Auditor may be escorted by Licensee personnel when on Licensee premises, and will not unreasonably interfere with Licensee's normal course of business. Following

conclusion of the audit, the Auditor will provide both Microsoft and Licensee with a report of the results of the audit.

- (c) Frequency and Costs. Audits will not be performed more than once every 12 months, unless an audit discloses a Material Discrepancy, in which case follow-up audits may be conducted until the Material Discrepancy has been resolved. Licensee will promptly pay the costs of any audit(s) that reveal a Material Discrepancy; otherwise, Microsoft will be responsible for the costs. “**Material Discrepancy**” means, with respect to Royalties, the greater of 5% or \$10,000 when compared to the amount that was reported during the period subject to audit; and/or with respect to other terms of this Agreement, material non-compliance with any other material terms.

4. **Confidentiality**. Royalty Reports, Audit Information, and audit reports are Licensee’s confidential information. Microsoft will not disclose them except as may be required by applicable law or as may be required by judicial or governmental order. If possible under the terms of the order, Microsoft will either give Licensee prior notice of the disclosure to enable it to seek a protective order or obtain written assurance that the confidential information will receive the highest level of applicable protection.

5. **Representations and Warranties**

- 5.1. Mutual. Each party represents and warrants that (a) the person executing this Agreement on its behalf has all necessary power and authority to do so, and that upon such signature this Agreement is a legal, valid and binding obligation enforceable against such party, and (b) it is entering into this Agreement in good faith.

- 5.2. DISCLAIMER. EXCEPT AS PROVIDED IN **SECTION 5.1**, EACH PARTY DISCLAIMS ALL WARRANTIES, GUARANTEES, AND CONDITIONS, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OR MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT.

6. **LIMITATIONS OF REMEDIES & LIABILITY**. EXCEPT WITH RESPECT TO A BREACH OF **SECTION 2.2** (NOTICE), OR WITH RESPECT TO ANY INFRINGEMENT OR MISAPPROPRIATION OF EITHER PARTY’S INTELLECTUAL PROPERTY RIGHTS, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, NEITHER PARTY IS LIABLE FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR SPECIAL DAMAGES WHATSOEVER ARISING OUT OF OR IN CONNECTION WITH ANY PROVISION OF THIS AGREEMENT, REGARDLESS OF THE LEGAL THEORY UPON WHICH ANY CLAIM FOR SUCH DAMAGES IS BASED. THE FOREGOING EXCLUSION APPLIES EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES IN ADVANCE AND EVEN IF ANY AVAILABLE REMEDY FAILS OF ITS ESSENTIAL PURPOSE.

7. **Term & Termination**

- 7.1. Term. The terms of this Agreement commence upon Microsoft’s receipt of the Prepaid Royalties and continue in effect until all of Microsoft’s rights under the Necessary Claims expire, unless this Agreement is terminated.

- 7.2. Termination. Licensee may terminate this Agreement at any time, in its sole discretion and without cause, by providing written notice to Microsoft. Microsoft may terminate this Agreement by giving Licensee written notice of termination: (i) immediately and at any time, if Licensee is in material breach of **Section 2.2**; or (ii) at any time if Licensee is in material breach of any term or condition of this Agreement and fails to remedy that breach within 60 days after written notice thereof. If Licensee or any of its Affiliates files, maintains or voluntarily participates in a patent infringement lawsuit against Microsoft, its Affiliates, or any Protocol licensee on account of that entity’s implementation of a Protocol, then the license grants in **Section 2.1** are terminated as of the Effective Date with respect to any Implementation of the same Protocol.

- 7.3. Effect of Expiration or Termination. If this Agreement is terminated, Licensee will have no further rights under this Agreement, and the following Sections will survive any expiration or termination of the Agreement: **Sections 2.3** (Reservation of Rights); **3.2 – 3.4** (Royalties; Payments; and Taxes),

with respect to Royalty obligations accrued prior to expiration or termination; **3.5** (Recordkeeping and Audits), for a period of 2 years following expiration or termination; **5** (Representations and Warranties), **6** (Limitation of Remedies & Liability), **7.3** (Effect of Expiration or Termination) and **8** (Miscellaneous). Any expiration or termination of this Agreement is without prejudice to any right or remedy of either party arising out of any breach of this Agreement, including without limitation recovery of any monies due or claimed due under this Agreement.

8. Miscellaneous

- 8.1. Notices. All notices and requests between the parties in connection with this Agreement are deemed given on the day they are received either by messenger, delivery service, or in the United States of America mails, postage prepaid, certified or registered, return receipt requested, and addressed using the contact information indicated on the first page of this Agreement for Licensee, the contact information indicated below for Microsoft, or to such other address as the party to receive the notice or request so designates per this notice provision:

Microsoft Licensing GP Attn: Special Agreements Dept. 551, Volume Licensing 6100 Neil Road, Suite 210 Reno, Nevada 89511-1137	Copy To: Microsoft Corporation Attn: General Manager, Interoperability Group Legal and Corporate Affairs One Microsoft Way Redmond, WA 98052-6399
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- 8.2. Governing Law; Jurisdiction; Attorneys' Fees. The laws of the State of Washington govern this Agreement. Licensee consents to exclusive jurisdiction and venue in the federal courts sitting in King County, Washington, unless no federal subject matter jurisdiction exists, in which case Licensee consents to exclusive jurisdiction and venue in the Superior Court of King County, Washington. Licensee waives all defenses of lack of personal jurisdiction and forum non conveniens. Process may be served on either party in the manner authorized by applicable law or court rule. In any formal action or suit to enforce any right or remedy under this Agreement or to interpret any provision of this Agreement, the prevailing party is entitled to recover its costs, including reasonable attorneys' fees.
- 8.3. Assignment. Microsoft may assign this Agreement to an Affiliate. Otherwise, neither party may assign or otherwise transfer this agreement or any of its rights or obligations under this Agreement, whether by operation of contract, law, or otherwise without the consent of the other party, which will not be unreasonably withheld. Any attempted assignment in violation of this **Section 8.3** is null and void and has no force or effect.
- 8.4. Entire Agreement and Modifications. This Agreement (including its Exhibit) constitutes the entire agreement between the parties with respect to its subject matter and merges all prior and contemporaneous communications on such subject matter. No modifications of this Agreement are effective unless contained in a subsequent written agreement that expressly references this Agreement and its intent to modify its terms, and is signed by duly authorized representatives of Licensee and Microsoft.

**Exhibit A
Protocols
(November 06, 2009)**

Protocol Name	Technical Documentation Title
1. .NET Context Exchange Protocol	[MC-NETCEX]: .NET Context Exchange Protocol Specification
2. .NET NegotiateStream Protocol	[MS-NNS]: .NET NegotiateStream Protocol Specification
3. .NET Remoting Protocol	[MS-NRBF]: .NET Remoting: Binary Format Data Structure [MS-NRSL]: .NET Remoting: Lifetime Services Extension [MS-NRTP]: .NET Remoting Core Protocol Specification
4. .NET Remoting Protocol: Lifetime Services Extension	[MS-NRSL]: .NET Remoting: Lifetime Services Extension
5. .NET Tracing Protocol	[MS-NETTR]: .NET Tracing Protocol Specification
6. 802.11: Proximity Service Discovery Information Element (PSD-IE) Extension	[MS-PSDP]: Proximity Service Discovery Protocol Specification
7. Active Directory Technical Specification	[MS-ADA1]: Active Directory Schema Attributes A-L [MS-ADA2]: Active Directory Schema Attributes M [MS-ADA3]: Active Directory Schema Attributes N-Z [MS-ADLS]: Active Directory Lightweight Directory Services Schema [MS-ADSC]: Active Directory Schema Classes [MS-ADTS]: Active Directory Technical Specification
8. ASP.NET State Server Protocol	[MS-ASP]: ASP.NET State Server Protocol Specification
9. Authenticated Internet Protocol	[MS-AIPS]: Authenticated Internet Protocol Specification
10. Authentication Protocol Domain Support	[MS-APDS]: Authentication Protocol Domain Support Specification
11. Auxiliary Display Protocol	[MS-AXDS]: Auxiliary Display Protocol Specification
12. Background Intelligent Transfer Service (BITS) Peercaching: Content Retrieval Protocol	[MS-BPCR]: Background Intelligent Transfer Service (BITS) Peer-Caching: Content Retrieval Protocol Specification
13. Background Intelligent Transfer Service (BITS) Peercaching: Peer Authentication Protocol	[MS-BPAU]: Background Intelligent Transfer Service (BITS) Peer-Caching: Peer Authentication Protocol Specification
14. Background Intelligent Transfer Service (BITS) Peercaching: Peer Discovery Protocol	[MS-BPDP]: Background Intelligent Transfer Service (BITS) Peer-Caching: Peer Discovery Protocol Specification
15. BackupKey Remote Protocol	[MS-BKRP]: BackupKey Remote Protocol Specification
16. Certificate Services Remote Administration Protocol	[MS-CSRA]: Certificate Services Remote Administration Protocol Specification
17. Certificate Templates	[MS-CRTD]: Certificate Templates Structure Specification
18. Common Internet File System (CIFS) Browser Auxiliary Protocol	[MS-BRWSA]: Common Internet File System (CIFS) Browser Auxiliary Protocol Specification

19. Common Internet File System (CIFS) Browser Protocol	[MS-BRWS]: Common Internet File System (CIFS) Browser Protocol Specification
20. Common Internet File System (CIFS) Protocol	[MS-CIFS]: Common Internet File System (CIFS) Protocol Specification [MS-FSCC]: File System Control Codes
21. Component Object Model Plus (COM+) Event System Protocol	[MS-COMEV]: Component Object Model Plus (COM+) Event System Protocol Specification
22. Component Object Model Plus (COM+) Remote Administration Protocol	[MS-COMA]: Component Object Model Plus (COM+) Remote Administration Protocol Specification [MS-COMT]: Component Object Model Plus (COM+) Tracker Service Protocol Specification
23. Component Object Model Plus (COM+) Remote Protocol	[MS-COM]: Component Object Model Plus (COM+) Protocol Specification
24. Component Object Model Plus Tracker Service Protocol	[MS-COMT]: Component Object Model Plus (COM+) Tracker Service Protocol Specification
25. Connection Point Services: Phonebook Data Structure	[MS-CPSP]: Connection Point Services: Phonebook Data Structure
26. Corporate Error Reporting Version 2.0 Protocol Specification	[MS-CER2]: Corporate Error Reporting Version 2.0 Protocol Specification
27. Credential Security Support Provider (CredSSP) Protocol	[MS-CSSP]: Credential Security Support Provider (CredSSP) Protocol Specification
28. DCOM Interfaces for Remote Data Services	[MS-ADTG]: Remote Data Services (RDS) Transport Protocol Specification
29. Digest Access Authentication: Microsoft Extensions	[MS-DPSP]: Digest Protocol Extensions
30. Directory Replication Service Remote Protocol (drsuapi)	[MS-DRSR]: Directory Replication Service (DRS) Remote Protocol Specification [MS-DRDM]: Directory Replication and Data Management (DRDM) Remote Protocol Specification
31. Directory Services Markup Language (DSML) 2.0 Protocol Extensions	[MS-DSML]: Directory Services Markup Language (DSML) 2.0 Protocol Extensions
32. DirectPlay 4 Protocol	[MS-DPDX]: DirectPlay DXDiag Usage Protocol Specification
33. DirectPlay 8 Protocol	[MS-DPDX]: DirectPlay DXDiag Usage Protocol Specification
34. Disk Management Remote Protocol	[MS-DMRP]: Disk Management Remote Protocol Specification
35. Distributed Component Object Model (DCOM) Remote Protocol	[MS-DCOM]: Distributed Component Object Model (DCOM) Remote Protocol Specification
36. Distributed File System (DFS): Namespace Management Protocol	[MS-DFSNM]: Distributed File System (DFS): Namespace Management Protocol Specification
37. Distributed File System (DFS): Namespace Referral Protocol	[MS-DFSC]: Distributed File System (DFS): Referral Protocol Specification
38. Distributed Link Tracking: Workstation Protocol	[MS-DLTV]: Distributed Link Tracking: Workstation Protocol Specification
39. Domain Name Service (DNS) Server Management Protocol	[MS-DNSP]: Domain Name Service (DNS) Server Management Protocol Specification
40. Dynamic Host Configuration Protocol (DHCP) Extensions	[MS-DHCPE]: Dynamic Host Configuration Protocol (DHCP) Extensions

41. Dynamic Host Configuration Protocol (DHCP) Extensions for Network Access Protection (NAP)	[MS-DHCPN]: Dynamic Host Configuration Protocol (DHCP) Extensions for Network Access Protection (NAP)
42. Encrypting File System Remote Protocol	[MS-EFSR]: Encrypting File System Remote (EFSRPC) Protocol Specification
43. Enhanced Metafile (EMF) Format	[MS-EMF]: Enhanced Metafile Format Specification
44. Enhanced Metafile (EMF) Format: Plus Extensions (EMF+)	[MS-EMFPLUS]: Enhanced Metafile Format Plus Extensions Specification
45. Enhanced Metafile (EMF) Spool Format	[MS-EMFSPool]: Enhanced Metafile Spool Format Specification
46. EventLog Remoting Protocol Version 1.0	[MS-EVEN]: Eventlog Remote Protocol Specification
47. EventLog Remoting Protocol Version 6.0	[MS-EVEN6]: Eventlog Remote Protocol Version 6.0 Specification
48. ExtendedError Remote Data Structure	[MS-EERR]: ExtendedError Remote Data Structure
49. Extensible Authentication Protocol Microsoft Challenge Handshake Authentication Protocol (EAP-MSCHAPv2)	[MS-CHAP]: Extensible Authentication Protocol Method for Microsoft Challenge Handshake Authentication Protocol (CHAP) Specification
50. Failover Cluster: Cluster Management Remote Protocol (ClusAPI)	[MS-CMRP]: Failover Cluster: Management API (ClusAPI) Protocol Specification
51. FailoverCluster: Setup and Validation Protocol (ClusPrep)	[MS-CSVP]: Failover Cluster: AND Validation Protocol (ClusPrep) Specification
52. FAX Server and Client Remote Protocol	[MS-FAX]: Fax Server and Client Remote Protocol Specification
53. File Server Resource Manager (FSRM) Protocol	[MS-FSRM]: File Server Resource Manager Protocol Specification
54. File Transfer Protocol over Secure Sockets Layer (FTPS)	[MS-FTPS]: File Transfer Protocol over Secure Sockets Layer (FTPS) Specification
55. Firewall and Advanced Security Protocol	[MS-FASP]: Firewall and Advanced Security Protocol Specification
56. FrontPage Server Remote Protocol Extensions	[MS-FPSE]: FrontPage Server Extensions Remote Protocol Specification
57. Generic Security Service Algorithm for Secret Key Transaction Authentication for DNS (GSS-TSIG) Protocol Extension	[MS-GSSA]: Generic Security Service Algorithm for Secret Key Transaction Authentication for DNS (GSS-TSIG) Protocol Extension
58. Group Policy: Audit Configuration Extension	[MS-GPAC]: Group Policy: Audit Configuration Extension
59. Group Policy: Core Protocol	[MS-GPOL]: Group Policy: Core Protocol Specification
60. Group Policy: Deployed Printer Connections Protocol Extension	[MS-GPDPC]: Group Policy: Deployed Printer Connections Extension
61. Group Policy: Encrypting File System Extension	[MS-GPEF]: Group Policy: Encrypting File System Extension
62. Group Policy: Folder Redirection Protocol Extension	[MS-GPFR]: Group Policy: Folder Redirection Protocol Extension
63. Group Policy: Host Security Configuration	[MS-GPSB]: Group Policy: Security Protocol Extension
64. Group Policy: Internet Explorer Maintenance Extension	[MS-GPIE]: Group Policy: Internet Explorer Maintenance Extension

65. Group Policy: IP Security (IPSec) Protocol Extension	[MS-GPIPEC]: Group Policy: IP Security (IPSec) Protocol Extension
66. Group Policy: Preferences Extension	[MS-GPPREF]: Group Policy: Preferences Extension Data Structure
67. Group Policy: Registry Extension Encoding	[MS-GPREG]: Group Policy: Registry Extension Encoding
68. Group Policy: Scripts Extension Encoding	[MS-GPSCR]: Group Policy: Scripts Extension Encoding
69. Group Policy: Software Installation Protocol Extension	[MS-GPSI]: Group Policy: Software Installation Protocol Extension
70. Group Policy: Wireless/Wired Protocol Extension	[MS-GPWL]: Group Policy: Wireless/Wired Protocol Extension
71. Health Certificate Enrollment Protocol	[MS-HCEP]: Health Certificate Enrollment Protocol Specification
72. ICertPassage Remote Protocol	[MS-ICPR]: ICertPassage Remote Protocol Specification
73. IManagedObject Interface Protocol	[MS-IOI]: IManagedObject Interface Protocol Specification
74. InitShutdown Protocol	[MS-RSP]: Remote Shutdown Protocol Specification
75. Internet Information Services (IIS) IMSAdminBaseW Remote Protocol	[MS-IMSA]: Internet Information Services (IIS) IMSAdminBaseW Remote Protocol Specification
76. Internet Information Services (IIS) Inetinfo Remote Protocol	[MS-IRP]: Internet Information Services (IIS) Inetinfo Remote Protocol Specification
77. Internet Information Services (IIS) ServiceControl Protocol	[MS-IISS]: Internet Information Services (IIS) ServiceControl Protocol Specification
78. Internet Key Exchange (IKE) Protocol Extensions	[MS-IKEE]: Internet Key Exchange Protocol Extensions
79. IRemoteDispatch Interface	[MS-IOI]: IManagedObject Interface Protocol Specification
80. Kerberos Network Authentication Service (V5) Extensions	[MS-KILE]: Kerberos Protocol Extensions
81. Kerberos Network Authentication Service (V5) Service for User (S4U) Extension	[MS-SFU]: Kerberos Protocol Extensions: Service for User and Constrained Delegation Protocol Specification
82. Link Layer Topology Discovery (LLTD) Protocol	[MS-LLTD]: Link Layer Topology Discovery (LLTD) Protocol Specification
83. Local Security Authority (Domain Policy) Remote Protocol	[MS-LSAD]: Local Security Authority (Domain Policy) Remote Protocol Specification
84. Local Security Authority (Translation Methods) Remote Protocol	[MS-LSAT]: Local Security Authority (Translation Methods) Remote Protocol Specification
85. Media Stream Broadcast (MSB) Protocol	[MS-MSB]: Media Stream Broadcast (MSB) Protocol Specification
86. Message Queuing (MSMQ): Binary Reliable Message Routing Protocol	[MS-MQBR]: Message Queuing (MSMQ): Binary Reliable Message Routing Algorithm
87. Message Queuing (MSMQ): Data Structures	[MS-MQMQ]: Message Queuing (MSMQ): Data Structures
88. Message Queuing (MSMQ): Directory Service Change Notification Protocol	[MS-MQCN]: Message Queuing (MSMQ): Directory Service Change Notification Protocol

89. Message Queuing (MSMQ): Directory Service Discovery Protocol	[MS-MQSD): Message Queuing (MSMQ): Directory Service Discovery Protocol Specification
90. Message Queuing (MSMQ): Directory Service Protocol	[MS-MQDS): Message Queuing (MSMQ): Directory Service Protocol Specification
91. Message Queuing (MSMQ): Queue Manager Client Protocol	[MS-MQMCP]: Message Queuing (MSMQ): Queue Manager Client Protocol Specification
92. Message Queuing (MSMQ): Queue Manager Management Protocol	[MS-MQMR): Message Queuing (MSMQ): Queue Manager Management Protocol Specification
93. Message Queuing (MSMQ): Queue Manager Remote Read Protocol	[MS-MQRR): Message Queuing (MSMQ): Queue Manager Remote Read Protocol Specification
94. Message Queuing (MSMQ): Queue Manager to Queue Manager Protocol	[MS-MQMP): Message Queuing (MSMQ): Queue Manager to Queue Manager Protocol Specification
95. Microsoft Content Indexing Services Protocol	[MS-MCIS): Content Indexing Services Protocol Specification
96. Microsoft Dynamic Host Configuration Protocol (DHCP) Server Management Protocol	[MS-DHCPM): Microsoft Dynamic Host Configuration Protocol (DHCP) Server Management Protocol Specification
97. Microsoft Management Console (MMC) snapin: RRAS	[MS-RRASM): Routing and Remote Access Server (RRAS) Management Protocol Specification
98. Microsoft OCSP Administration Protocol	[MS-OCSPA): Microsoft OCSP Administration Protocol Specification
99. Microsoft Protected Extensible Authentication Protocol (PEAP)	[MS-PEAP): Protected Extensible Authentication Protocol (PEAP) Specification
100. MSDTC Connection Manager: Connection Multiplexing Protocol	[MS-CMP): MSDTC Connection Manager: OleTx Multiplexing Protocol Specification
101. MSDTC Connection Manager: OleTx Management Protocol	[MS-CMOM): MSDTC Connection Manager: OleTx Management Protocol Specification
102. MSDTC Connection Manager: OleTx Transaction Internet Protocol	[MS-DTCM): MSDTC Connection Manager: OleTx Transaction Internet Protocol Specification
103. MSDTC Connection Manager: OleTx Transaction Protocol	[MS-DTCLU): MSDTC Connection Manager: OleTx Transaction Protocol Logical Unit Mainframe Extension [MS-DTCO): MSDTC Connection Manager: OleTx Transaction Protocol Specification
104. MSDTC Connection Manager: OleTx Transaction Protocol Logical Unit Mainframe Extension	[MS-DTCLU): MSDTC Connection Manager: OleTx Transaction Protocol Logical Unit Mainframe Extension
105. MSDTC Connection Manager: OleTx Transports Protocol	[MS-CMPO): MSDTC Connection Manager: OleTx Transports Protocol Specification
106. Name Service Provider Interface (NSPI) Protocol	[MS-NSPI): Name Service Provider Interface (NSPI) Protocol Specification
107. Net Logon Remote Protocol	[MS-NRPC): Netlogon Remote Protocol Specification
108. NetBIOS over TCP (NetBT) Extensions	[MS-NBTE): NetBIOS over TCP (NetBT) Extensions
109. Network Access Protection Statement of Health	[MS-SOH): Statement of Health for Network Access Protection (NAP) Protocol Specification
110. Network Time Protocol (NTP) Authentication Extensions	[MS-SNTP): Network Time Protocol (NTP) Authentication Extensions
111. NT LAN Manager (NTLM) Authentication Protocol	[MS-NLMP): NT LAN Manager (NTLM) Authentication Protocol Specification

	[MS-NTHT]: NTLM Over HTTP Protocol Specification [MS-SMTP]: NT LAN Manager (NTLM) Authentication: Simple Mail Transfer Protocol (SMTP) Extension [MS-TNAP]: Telnet: NT LAN Manager (NTLM) Authentication Protocol Specification
112. NT LAN Manager (NTLM) Authentication: Simple Mail Transfer Protocol (SMTP) Extension	[MS-SMTP]: NT LAN Manager (NTLM) Authentication: Simple Mail Transfer Protocol (SMTP) Extension
113. NTLM Over HTTP Protocol	[MS-NTHT]: NTLM Over HTTP Protocol Specification
114. OLE Automation Protocol	[MS-OAUT]: OLE Automation Protocol Specification
115. Online Certificate Status Protocol (OCSP)	[MS-OCSP]: Online Certificate Status Protocol (OCSP) Extensions
116. Peer Name Resolution Protocol (PNRP) Version 4.0	[MS-PNRP]: Peer Name Resolution Protocol (PNRP) Version 4.0 Specification
117. Performance Counter Query Protocol	[MS-PCQ]: Performance Counter Query Protocol Specification
118. Performance Logs & Alerts (PLA) Control Protocol	[MS-PLA]: Performance Logs and Alerts Protocol Specification
119. Plug and Play Remote Protocol	[MS-PNPR]: Plug and Play Remote (PNPR) Protocol Specification
120. Point-to-Point Tunneling Protocol (PPTP) Profile	[MS-PTPT]: Point-to-Point Tunneling Protocol (PPTP) Profile
121. PowerShell Remoting Protocol	[MS-PSRP]: PowerShell Remoting Protocol Specification
122. Print System Asynchronous Notification Protocol	[MS-PAN]: Print System Asynchronous Notification Protocol Specification
123. Print System Asynchronous Remote Protocol	[MS-PAR]: Print System Asynchronous Remote Protocol Specification
124. Print System Remote Protocol	[MS-RPRN]: Print System Remote Protocol Specification
125. Privilege Attribute Certificate (PAC) Data Structure	[MS-PAC]: Privilege Attribute Certificate Data Structure
126. Public Key Cryptography for Initial Authentication in Kerberos (PKINIT): Microsoft Extensions	[MS-PKCA]: Public Key Cryptography for Initial Authentication (PKINIT) in Kerberos Protocol Specification
127. Real-Time Streaming Protocol (RTSP): Windows Media Extensions	[MS-RTSP]: Real-Time Streaming Protocol (RTSP) Windows Media Extensions
128. Remote Access Server Advertisement (RASADV) Protocol	[MS-RASA]: Remote Access Server Advertisement (RASADV) Protocol Specification
129. Remote Administration Protocol (RAP)	[MS-RAP]: Remote Administration Protocol Specification
130. Remote Assistance Offer RA Protocols	[MS-RAI]: Remote Assistance Initiation Protocol Specification
131. Remote Assistance Protocol	[MS-RA]: Remote Assistance Protocol Specification
132. Remote Certificate Mapping Protocol	[MS-RCMP]: Remote Certificate Mapping Protocol Specification
133. Remote Data Services Transport Protocol	[MS-ADTG]: Remote Data Services (RDS) Transport Protocol Specification

134.Remote Desktop Protocol: Audio Redirection Virtual Channel	[MS-RDPEA]: Remote Desktop Protocol: Audio Output Virtual Channel Extension
135.Remote Desktop Protocol: Basic Connectivity and Graphics Remoting	[MS-RDPBCGR]: Remote Desktop Protocol: Basic Connectivity and Graphics Remoting Specification
136.Remote Desktop Protocol: Clipboard Virtual Channel	[MS-RDPECLIP]: Remote Desktop Protocol: Clipboard Virtual Channel Extension
137.Remote Desktop Protocol: Composited Remoting	[MS-RDPCR2]: Remote Desktop Protocol: Composited Remoting V2 Specification
138.Remote Desktop Protocol: Desktop Composition Extension	[MS-RDPEDC]: Remote Desktop Protocol: Desktop Composition Virtual Channel Extension
139.Remote Desktop Protocol: Dynamic Channel Virtual Channel	[MS-RDPEDYC]: Remote Desktop Protocol: Dynamic Channel Virtual Channel Extension
140.Remote Desktop Protocol: File System Virtual Channel	[MS-RDPEFS]: Remote Desktop Protocol: File System Virtual Channel Extension
141.Remote Desktop Protocol: GDI Acceleration Extension	[MS-RDPEGDI]: Remote Desktop Protocol: Graphics Device Interface (GDI) Acceleration Extensions
142.Remote Desktop Protocol: Licensing Extension	[MS-RDPELE]: Remote Desktop Protocol: Licensing Extension
143.Remote Desktop Protocol: Multiparty Virtual Channel	[MS-RDPEC]: Remote Desktop Protocol: Multiparty Virtual Channel
144.Remote Desktop Protocol: Plug and Play Virtual Channel	[MS-RDPEPNP]: Remote Desktop Protocol: Plug and Play Devices Virtual Channel Extension
145.Remote Desktop Protocol: Printing Virtual Channel	[MS-RDPEPC]: Remote Desktop Protocol: Print Virtual Channel Extension
146.Remote Desktop Protocol: Remote Programs Virtual Channel	[MS-RDPERP]: Remote Desktop Protocol: Remote Programs Virtual Channel Extension
147.Remote Desktop Protocol: Serial Port Virtual Channel	[MS-RDPESP]: Remote Desktop Protocol: Serial Port Virtual Channel Extension
148.Remote Desktop Protocol: Session Selection Extension	[MS-RDPEPS]: Remote Desktop Protocol: Session Selection Extension
149.Remote Desktop Protocol: Smart Card Virtual Channel	[MS-RDPESC]: Remote Desktop Protocol: Smart Card Virtual Channel Extension
150.Remote Desktop Protocol: XPS Printing Virtual Channel	[MS-RDPEXPS]: Remote Desktop Protocol: XML Paper Specification (XPS) Print Virtual Channel Extension
151.Remote Mailslot Protocol	[MS-MAIL]: Remote Mailslot Protocol Specification
152.Remote Network Driver Interface Specification (RNDIS) Protocol	[MS-RNDIS]: Remote Network Driver Interface Specification (RNDIS) Protocol Specification
153.Remote Procedure Call (RPC) over HTTP Protocol	[MS-RPCH]: Remote Procedure Call Over HTTP Protocol Specification
154.Remote Procedure Call Protocol Extensions	[MS-RPCE]: Remote Procedure Call Protocol Extensions
155.Remote Shutdown Protocol	[MS-RSP]: Remote Shutdown Protocol Specification
156.Removable Storage Manager (RSM) Remote Protocol	[MS-RSMP]: Removable Storage Manager (RSM) Remote Protocol Specification
157.Rights Management Services (RMS): Client-Server Protocol	[MS-RMPR]: Rights Management Services (RMS): Client-to-Server Protocol Specification
158.Secure Socket Tunneling Protocol (SSTP)	[MS-SSTP]: Secure Socket Tunneling Protocol (SSTP) Specification
159.Security Account Manager Remote Protocol (Client-to-Server)	[MS-SAMR]: Security Account Manager (SAM) Remote Protocol Specification (Client-to-Server)

160. Server Message Block (SMB) Version 1.0 Protocol	[MS-SMB]: Server Message Block (SMB) Protocol Specification [MS-FSCC]: File System Control Codes
161. Server Message Block (SMB) Version 2.0 Protocol	[MS-SMB2]: Server Message Block (SMB) Version 2.0 Protocol Specification [MS-FSCC]: File System Control Codes
162. Server Service Remote Protocol (SRVSVC)	[MS-SRVS]: Server Service Remote Protocol Specification
163. Server Side Include (SSI) 1.4 Protocol	[MS-PASS]: Passport Server Side Include (SSI) Version 1.4 Protocol Specification
164. Service Control Manager Remote Protocol	[MS-SCMR]: Service Control Manager Remote Protocol Specification
165. Simple and Protected Generic Security Service Application Program Interface Negotiation Mechanism (SPNEGO): Microsoft Extension	[MS-SPNG]: Simple and Protected Generic Security Service Application Program Interface Negotiation Mechanism (SPNEGO) Protocol Extensions
166. Simple Network Time Protocol (SNTP)	[MS-SNTP]: Network Time Protocol (NTP) Authentication Extensions
167. Task Scheduler Remoting Protocol (TaskSchedProt)	[MS-TSCH]: AT Service Remote Protocol Specification
168. Telephony Remote Protocol	[MS-TRP]: Telephony Remote Protocol Specification
169. Telnet Server Remote Administration Protocol	[MS-TSRAP]: Telnet Server Remote Administration Protocol Specification
170. Telnet: NTLM Authentication Protocol Extensions	[MS-TNAP]: Telnet: NT LAN Manager (NTLM) Authentication Protocol Specification
171. Telnet: VTNT Terminal Type Format	[MS-TVTT]: Telnet: VTNT Terminal Type Protocol Specification
172. Teredo Extensions	[MS-TERE]: Teredo Extensions
173. Terminal Services Gateway Server Protocol	[MS-TSGU]: Terminal Services Gateway Server Protocol Specification
174. Terminal Services Terminal Server Runtime Interface (RPC)	[MS-TSTS]: Terminal Services Terminal Server Runtime Interface Protocol Specification
175. Transaction Internet Protocol (TIP) Profile	[MS-TIPP]: Transaction Internet Protocol (TIP) Extensions
176. User Name Mapping Protocol	[MS-UNMP]: User Name Mapping Protocol Specification
177. Virtual Disk Service (VDS) Remote Protocol	[MS-VDS]: Virtual Disk Service (VDS) Protocol Specification
178. VT100 Terminal Emulation: Wide Character Extensions (VT-UTF8 and VT100+)	[MS-VUVP]: VT-UTF8 and VT100+ Protocols Specification
179. W32Time Remote Protocol	[MS-W32T]: W32Time Remote Protocol Specification
180. Web Browser Federated Sign-On Protocol	[MS-MWBF]: Microsoft Web Browser Federated Sign-On Protocol Specification
181. Web Browser Federated Sign-On Protocol Extensions	[MS-MWBE]: Microsoft Web Browser Federated Sign-On Protocol Extensions
182. Web Distributed Authoring and Versioning (WebDAV) Protocol: Client Extensions	[MS-WDV]: Web Distributed Authoring and Versioning (WebDAV) Protocol: Client Extensions

183. Web Distributed Authoring and Versioning (WebDAV) Protocol: Microsoft Extensions	[MS-WDVME]: Web Distributed Authoring and Versioning (WebDAV) Protocol: Microsoft Extensions
184. Web Distributed Authoring and Versioning (WebDAV) Protocol: Server Extensions	[MS-WDVSE]: Web Distributed Authoring and Versioning (WebDAV) Protocol: Server Extensions
185. Web Point-and-Print Protocol	[MS-WPRN]: Web Point-and-Print Protocol Specification
186. Web Services Policy Assertions	[MS-WSPOL]: Web Services: Policy Assertions Format
187. Windows CardSpace Token Acquisition Protocol	[MS-CTAP]: CardSpace Token Acquisition Protocol Specification
188. Windows Client Certificate Enrollment Protocol	[MS-WCCE]: Windows Client Certificate Enrollment Protocol Specification
189. Windows Deployment Services Multicast Protocol	[MS-WDSMA]: Windows Deployment Services Multicast Application Protocol [MS-WDSMSI]: Windows Deployment Services Multicast Session Initiation Protocol [MS-WDSMT]: Windows Deployment Services Multicast Transport Protocol
190. Windows Deployment Services Operating System Deployment Protocol	[MS-WDSOSD]: Windows Deployment Services Operation System Deployment Protocol Specification
191. Windows Management Instrumentation Encoding Version 1.0	[MS-WMIO]: Windows Management Instrumentation Encoding Version 1.0 Protocol Specification
192. Windows Management Instrumentation Remote Protocol	[MS-WMI]: Windows Management Instrumentation Remote Protocol Specification [MS-WMIO]: Windows Management Instrumentation Encoding Version 1.0 Protocol Specification
193. Windows Media Digital Rights Management (WMDRM): License Formats	[MS-DRM] : Digital Rights Management License Acquisition Protocol Specification
194. Windows Media HTTP Push Distribution Protocol	[MS-WMHTTP]: Windows Media HTTP Push Distribution Protocol Specification [MS-WMLOG]: Windows Media Log Data Structure
195. Windows Media HTTP Streaming Protocol	[MS-WMSP]: Windows Media HTTP Streaming Protocol Specification
196. Windows Media Log Data Structure	[MS-WMLOG]: Windows Media Log Data Structure
197. Windows Metafile (WMF) Format	[MS-WMF]: Windows Metafile Format Specification
198. Windows Remote Registry Protocol	[MS-RRP]: Windows Remote Registry Protocol Specification
199. Windows Search Protocol	[MS-WSP]: Windows Search Protocol Specification
200. Windows Security Health Agent (WSHA) and Windows Security Health Validator (WSHV) Protocol	[MS-WSH]: Windows Security Health Agent (WSHA) and Windows Security Health Validator (WSHV) Protocol Specification
201. Windows Server Update Services: Client-Server Protocol	[MS-WUSP]: Windows Update Services: Client-Server Protocol Specification
202. Windows System Resource Manager (WSRM) Protocol	[MS-WSRM]: Windows System Resource Manager (WSRM) Protocol Specification

203. Workstation Service Remote Protocol (WKSSVC)	[MS-WKST]: Workstation Service Remote Protocol Specification
204. WS-Atomic Transaction (WS-AT) Version 1.0 Protocol Extensions	[MS-WSRVCAT]: WS-AtomicTransaction (WS-AT) Version 1.0 Protocol Extensions
205. WS-Management Protocol Version 2.0 Extensions	[MS-WSMV]: Web Services Management Protocol Extensions for Windows Vista
206. WS-ReliableMessaging Protocol: Advanced Flow Control Extension	[MS-WSRVCRM]: WS-ReliableMessaging Protocol: Advanced Flow Control Extension
207. WS-ReliableMessaging Protocol: Reliable Request-Reply Extensions	[MS-WSRVCRr]: WS-ReliableMessaging Protocol: Reliable Request-Reply Extensions
208. WS-SecurityPolicy: SecurityPolicy Schema	[MS-WSSEC]: Web Services: Security Policy Assertions Format