

## [MS-ADA3]: Active Directory Schema Attributes N-Z

---

This document contains a partial list of the objects that exist in the Active Directory schema. Active Directory and all associated terms and concepts are described in the Microsoft-proprietary document titled "Active Directory Technical Specification", which has the following normative reference:

[MS-ADTS] Microsoft Corporation, "[Active Directory Technical Specification](#)", June 2007.

**Note** This document is not intended to stand on its own; it is intended to act as an appendix to the Active Directory Technical Specification, as specified in the normative reference shown above. For details about the Active Directory schema, see [\[MS-ADTS\]](#) section 3.1.1.2 (Active Directory Schema).

This document contains Active Directory schema objects of type "attribute" whose names start with the letters N through Z.

### Intellectual Property Rights Notice for Protocol Documentation

- This protocol documentation is covered by Microsoft copyrights. Regardless of any other terms that are contained in the terms of use for the Microsoft website that hosts this documentation, you may make copies of it in order to develop implementations of the protocols, and may distribute portions of it in your implementations of the protocols or your documentation as necessary to properly document the implementation. This permission also applies to any documents that are referenced in the protocol documentation.
- Microsoft does not claim any trade secret rights in this documentation.
- Microsoft has patents that may cover your implementations of the protocols. Neither this notice nor Microsoft's delivery of the documentation grants any licenses under those or any other Microsoft patents. If you are interested in obtaining a patent license, please contact [protocol@microsoft.com](mailto:protocol@microsoft.com).
- The names of companies and products contained in this documentation may be covered by trademarks or similar intellectual property rights. This notice does not grant any licenses under those rights.
- All other rights are reserved, and this notice does not grant any rights other than specifically described above, whether by implication, estoppel, or otherwise.

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

A protocol specification does not require the use of Microsoft programming tools or programming environments in order for you to develop an implementation. If you have access to Microsoft programming tools and environments you are free to take advantage of them.

## Revision Summary

Date	Revision History	Revision Class	Comments
03/14/2007	1.0		Version 1.0 release
04/10/2007	1.1		Version 1.1 release
05/18/2007	1.2		Version 1.2 release
06/08/2007	1.2.1	Editorial	Revised and edited the technical content.
07/10/2007	1.2.2	Editorial	Revised and edited the technical content.
08/17/2007	1.2.3	Editorial	Revised and edited the technical content.
09/21/2007	1.2.4	Editorial	Revised and edited the technical content.
10/26/2007	1.2.5	Editorial	Revised and edited the technical content.
01/25/2008	2.0	Major	Updated and revised the technical content.

# Table of Contents

<b>1</b>	<b>References.....</b>	<b>10</b>
<b>2</b>	<b>Attributes .....</b>	<b>12</b>
2.1	Attribute name .....	12
2.2	Attribute nameServiceFlags .....	12
2.3	Attribute nCName .....	13
2.4	Attribute nETBIOSName .....	13
2.5	Attribute netbootAllowNewClients .....	13
2.6	Attribute netbootAnswerOnlyValidClients .....	14
2.7	Attribute netbootAnswerRequests .....	14
2.8	Attribute netbootCurrentClientCount .....	14
2.9	Attribute netbootGUID .....	15
2.10	Attribute netbootInitialization .....	15
2.11	Attribute netbootIntelliMirrorOSes .....	16
2.12	Attribute netbootLimitClients .....	16
2.13	Attribute netbootLocallyInstalledOSes .....	16
2.14	Attribute netbootMachineFilePath .....	17
2.15	Attribute netbootMaxClients .....	17
2.16	Attribute netbootMirrorDataFile .....	17
2.17	Attribute netbootNewMachineNamingPolicy .....	18
2.18	Attribute netbootNewMachineOU .....	18
2.19	Attribute netbootSCPBL .....	18
2.20	Attribute netbootServer .....	19
2.21	Attribute netbootSIFFile .....	19
2.22	Attribute netbootTools .....	19
2.23	Attribute networkAddress .....	20
2.24	Attribute nextLevelStore .....	20
2.25	Attribute nextRid .....	21
2.26	Attribute nisMapEntry .....	21
2.27	Attribute nisMapName .....	21
2.28	Attribute nisNetgroupTriple .....	22
2.29	Attribute nonSecurityMember .....	22
2.30	Attribute nonSecurityMemberBL .....	22
2.31	Attribute notes .....	23
2.32	Attribute notificationList .....	23
2.33	Attribute nTGroupMembers .....	24
2.34	Attribute nTMixedDomain .....	24
2.35	Attribute ntPwdHistory .....	24
2.36	Attribute nTSecurityDescriptor .....	25
2.37	Attribute o .....	25
2.38	Attribute objectCategory .....	26
2.39	Attribute objectClass .....	26
2.40	Attribute objectClassCategory .....	27
2.41	Attribute objectClasses .....	27
2.42	Attribute objectCount .....	28
2.43	Attribute objectGUID .....	28
2.44	Attribute objectSid .....	29
2.45	Attribute objectVersion .....	29
2.46	Attribute oEMInformation .....	30
2.47	Attribute oMObjectClass .....	30
2.48	Attribute oMSyntax .....	31
2.49	Attribute oMTGuid .....	31

2.50	Attribute oMTIndxGuid .....	32
2.51	Attribute oncRpcNumber .....	32
2.52	Attribute operatingSystem .....	32
2.53	Attribute operatingSystemHotfix .....	33
2.54	Attribute operatingSystemServicePack .....	33
2.55	Attribute operatingSystemVersion .....	33
2.56	Attribute operatorCount .....	34
2.57	Attribute optionDescription .....	34
2.58	Attribute options .....	35
2.59	Attribute optionsLocation .....	35
2.60	Attribute organizationalStatus .....	35
2.61	Attribute originalDisplayTable .....	36
2.62	Attribute originalDisplayTableMSDOS .....	36
2.63	Attribute otherFacsimileTelephoneNumber .....	37
2.64	Attribute otherHomePhone .....	37
2.65	Attribute otherIpPhone .....	37
2.66	Attribute otherLoginWorkstations .....	38
2.67	Attribute otherMailbox .....	38
2.68	Attribute otherMobile .....	38
2.69	Attribute otherPager .....	39
2.70	Attribute otherTelephone .....	39
2.71	Attribute otherWellKnownObjects .....	40
2.72	Attribute ou .....	40
2.73	Attribute owner .....	41
2.74	Attribute ownerBL .....	41
2.75	Attribute packageFlags .....	42
2.76	Attribute packageName .....	42
2.77	Attribute packageType .....	42
2.78	Attribute pager .....	43
2.79	Attribute parentCA .....	43
2.80	Attribute parentCACertificateChain .....	43
2.81	Attribute parentGUID .....	44
2.82	Attribute partialAttributeDeletionList .....	44
2.83	Attribute partialAttributeSet .....	45
2.84	Attribute pekKeyChangeInterval .....	45
2.85	Attribute pekList .....	45
2.86	Attribute pendingCACertificates .....	46
2.87	Attribute pendingParentCA .....	46
2.88	Attribute perMsgDialogDisplayTable .....	47
2.89	Attribute perRecipDialogDisplayTable .....	47
2.90	Attribute personalTitle .....	47
2.91	Attribute photo .....	48
2.92	Attribute physicalDeliveryOfficeName .....	48
2.93	Attribute physicalLocationObject .....	49
2.94	Attribute pKICriticalExtensions .....	49
2.95	Attribute pKIDefaultCSPs .....	49
2.96	Attribute pKIDefaultKeySpec .....	50
2.97	Attribute pKIEnrollmentAccess .....	50
2.98	Attribute pKIExpirationPeriod .....	50
2.99	Attribute pKIExtendedKeyUsage .....	51
2.100	Attribute pKIKeyUsage .....	51
2.101	Attribute pKIMaxIssuingDepth .....	51
2.102	Attribute pKIOverlapPeriod .....	52
2.103	Attribute pKT .....	52
2.104	Attribute pKTGuid .....	53

2.105	Attribute policyReplicationFlags .....	53
2.106	Attribute portName.....	53
2.107	Attribute possibleInferiors .....	54
2.108	Attribute possSuperiors.....	54
2.109	Attribute postalAddress .....	55
2.110	Attribute postalCode .....	55
2.111	Attribute postOfficeBox .....	55
2.112	Attribute preferredDeliveryMethod .....	56
2.113	Attribute preferredLanguage .....	56
2.114	Attribute preferredOU .....	56
2.115	Attribute prefixMap.....	57
2.116	Attribute presentationAddress.....	57
2.117	Attribute previousCACertificates .....	58
2.118	Attribute previousParentCA.....	58
2.119	Attribute primaryGroupID.....	58
2.120	Attribute primaryGroupToken.....	59
2.121	Attribute primaryInternationalISDNNumber .....	59
2.122	Attribute primaryTelexNumber .....	60
2.123	Attribute printAttributes .....	60
2.124	Attribute printBinNames.....	60
2.125	Attribute printCollate .....	61
2.126	Attribute printColor.....	61
2.127	Attribute printDuplexSupported.....	61
2.128	Attribute printEndTime.....	62
2.129	Attribute printerName .....	62
2.130	Attribute printFormName.....	63
2.131	Attribute printKeepPrintedJobs .....	63
2.132	Attribute printLanguage .....	63
2.133	Attribute printMACAddress.....	64
2.134	Attribute printMaxCopies .....	64
2.135	Attribute printMaxResolutionSupported .....	64
2.136	Attribute printMaxXExtent .....	65
2.137	Attribute printMaxYExtent .....	65
2.138	Attribute printMediaReady .....	65
2.139	Attribute printMediaSupported .....	66
2.140	Attribute printMemory.....	66
2.141	Attribute printMinXExtent .....	66
2.142	Attribute printMinYExtent .....	67
2.143	Attribute printNetworkAddress .....	67
2.144	Attribute printNotify.....	67
2.145	Attribute printNumberUp .....	68
2.146	Attribute printOrientationsSupported .....	68
2.147	Attribute printOwner.....	69
2.148	Attribute printPagesPerMinute.....	69
2.149	Attribute printRate .....	69
2.150	Attribute printRateUnit.....	70
2.151	Attribute printSeparatorFile .....	70
2.152	Attribute printShareName.....	70
2.153	Attribute printSpooling .....	71
2.154	Attribute printStaplingSupported .....	71
2.155	Attribute printStartTime .....	71
2.156	Attribute printStatus.....	72
2.157	Attribute priority .....	72
2.158	Attribute priorSetTime .....	72
2.159	Attribute priorValue .....	73

2.160	Attribute privateKey .....	73
2.161	Attribute privilegeAttributes .....	74
2.162	Attribute privilegeDisplayName .....	74
2.163	Attribute privilegeHolder .....	74
2.164	Attribute privilegeValue .....	75
2.165	Attribute productCode .....	75
2.166	Attribute profilePath .....	75
2.167	Attribute proxiedObjectName .....	76
2.168	Attribute proxyAddresses .....	76
2.169	Attribute proxyGenerationEnabled .....	77
2.170	Attribute proxyLifetime .....	77
2.171	Attribute publicKeyPolicy .....	78
2.172	Attribute purportedSearch .....	78
2.173	Attribute pwdHistoryLength .....	78
2.174	Attribute pwdLastSet .....	79
2.175	Attribute pwdProperties .....	79
2.176	Attribute qualityOfService .....	80
2.177	Attribute queryFilter .....	80
2.178	Attribute queryPoint .....	81
2.179	Attribute queryPolicyBL .....	81
2.180	Attribute queryPolicyObject .....	81
2.181	Attribute rangeLower .....	82
2.182	Attribute rangeUpper .....	82
2.183	Attribute rDNAttID .....	83
2.184	Attribute registeredAddress .....	83
2.185	Attribute remoteServerName .....	84
2.186	Attribute remoteSource .....	84
2.187	Attribute remoteSourceType .....	84
2.188	Attribute remoteStorageGUID .....	85
2.189	Attribute replicaSource .....	85
2.190	Attribute replInterval .....	85
2.191	Attribute replPropertyMetaData .....	86
2.192	Attribute replTopologyStayOfExecution .....	87
2.193	Attribute replUpToDateVector .....	87
2.194	Attribute repsFrom .....	87
2.195	Attribute repsTo .....	88
2.196	Attribute requiredCategories .....	88
2.197	Attribute retiredReplDSASignatures .....	89
2.198	Attribute revision .....	89
2.199	Attribute rid .....	90
2.200	Attribute rIDAllocationPool .....	90
2.201	Attribute rIDAvailablePool .....	90
2.202	Attribute rIDManagerReference .....	91
2.203	Attribute rIDNextRID .....	91
2.204	Attribute rIDPreviousAllocationPool .....	92
2.205	Attribute rIDSetReferences .....	92
2.206	Attribute rIDUsedPool .....	92
2.207	Attribute rightsGuid .....	93
2.208	Attribute roleOccupant .....	93
2.209	Attribute roomNumber .....	94
2.210	Attribute rootTrust .....	94
2.211	Attribute rpcNsAnnotation .....	94
2.212	Attribute rpcNsBindings .....	95
2.213	Attribute rpcNsCodeset .....	95
2.214	Attribute rpcNsEntryFlags .....	95

2.215	Attribute rpcNsGroup .....	96
2.216	Attribute rpcNsInterfaceID .....	96
2.217	Attribute rpcNsObjectID .....	96
2.218	Attribute rpcNsPriority .....	97
2.219	Attribute rpcNsProfileEntry .....	97
2.220	Attribute rpcNsTransferSyntax .....	97
2.221	Attribute sAMAccountName .....	98
2.222	Attribute sAMAccountType .....	98
2.223	Attribute samDomainUpdates .....	99
2.224	Attribute schedule .....	100
2.225	Attribute schemaFlagsEx .....	100
2.226	Attribute schemaIDGUID .....	101
2.227	Attribute schemaInfo .....	101
2.228	Attribute schemaUpdate .....	102
2.229	Attribute schemaVersion .....	102
2.230	Attribute scopeFlags .....	102
2.231	Attribute scriptPath .....	103
2.232	Attribute sDRightsEffective .....	103
2.233	Attribute searchFlags .....	104
2.234	Attribute searchGuide .....	104
2.235	Attribute secretary .....	105
2.236	Attribute securityIdentifier .....	105
2.237	Attribute seeAlso .....	106
2.238	Attribute seqNotification .....	106
2.239	Attribute serialNumber .....	106
2.240	Attribute serverName .....	107
2.241	Attribute serverReference .....	107
2.242	Attribute serverReferenceBL .....	108
2.243	Attribute serverRole .....	108
2.244	Attribute serverState .....	109
2.245	Attribute serviceBindingInformation .....	109
2.246	Attribute serviceClassID .....	110
2.247	Attribute serviceClassInfo .....	110
2.248	Attribute serviceClassName .....	110
2.249	Attribute serviceDNSName .....	111
2.250	Attribute serviceDNSNameType .....	111
2.251	Attribute serviceInstanceVersion .....	111
2.252	Attribute servicePrincipalName .....	112
2.253	Attribute setupCommand .....	112
2.254	Attribute shadowExpire .....	113
2.255	Attribute shadowFlag .....	113
2.256	Attribute shadowInactive .....	113
2.257	Attribute shadowLastChange .....	113
2.258	Attribute shadowMax .....	114
2.259	Attribute shadowMin .....	114
2.260	Attribute shadowWarning .....	114
2.261	Attribute shellContextMenu .....	115
2.262	Attribute shellPropertyPages .....	115
2.263	Attribute shortServerName .....	115
2.264	Attribute showInAddressBook .....	116
2.265	Attribute showInAdvancedViewOnly .....	116
2.266	Attribute sIDHistory .....	117
2.267	Attribute signatureAlgorithms .....	117
2.268	Attribute siteGUID .....	118
2.269	Attribute siteLinkList .....	118

2.270	Attribute siteList.....	118
2.271	Attribute siteObject .....	119
2.272	Attribute siteObjectBL .....	119
2.273	Attribute siteServer .....	120
2.274	Attribute sn .....	120
2.275	Attribute sPNMappings .....	121
2.276	Attribute st.....	121
2.277	Attribute street .....	122
2.278	Attribute streetAddress .....	122
2.279	Attribute structuralObjectClass.....	123
2.280	Attribute subClassOf .....	123
2.281	Attribute subRefs .....	123
2.282	Attribute subSchemaSubEntry.....	124
2.283	Attribute superiorDNSRoot .....	124
2.284	Attribute superScopeDescription.....	125
2.285	Attribute superScopes .....	125
2.286	Attribute supplementalCredentials .....	125
2.287	Attribute supportedApplicationContext .....	126
2.288	Attribute syncAttributes .....	126
2.289	Attribute syncMembership .....	126
2.290	Attribute syncWithObject.....	127
2.291	Attribute syncWithSID.....	127
2.292	Attribute systemAuxiliaryClass .....	128
2.293	Attribute systemFlags .....	128
2.294	Attribute systemMayContain .....	129
2.295	Attribute systemMustContain .....	129
2.296	Attribute systemOnly .....	130
2.297	Attribute systemPossSuperiors.....	130
2.298	Attribute telephoneNumber.....	130
2.299	Attribute teletexTerminalIdentifier .....	131
2.300	Attribute telexNumber .....	131
2.301	Attribute templateRoots .....	132
2.302	Attribute templateRoots2 .....	132
2.303	Attribute terminalServer.....	133
2.304	Attribute textEncodedORAddress .....	133
2.305	Attribute thumbnailLogo .....	133
2.306	Attribute thumbnailPhoto .....	134
2.307	Attribute timeRefresh.....	134
2.308	Attribute timeVolChange .....	135
2.309	Attribute title .....	135
2.310	Attribute tokenGroups.....	135
2.311	Attribute tokenGroupsGlobalAndUniversal.....	136
2.312	Attribute tokenGroupsNoGCAcceptable.....	136
2.313	Attribute tombstoneLifetime .....	137
2.314	Attribute transportAddressAttribute .....	137
2.315	Attribute transportDLLName .....	137
2.316	Attribute transportType .....	138
2.317	Attribute treatAsLeaf .....	138
2.318	Attribute treeName.....	139
2.319	Attribute trustAttributes .....	139
2.320	Attribute trustAuthIncoming .....	140
2.321	Attribute trustAuthOutgoing.....	140
2.322	Attribute trustDirection .....	140
2.323	Attribute trustParent.....	141
2.324	Attribute trustPartner.....	141



2.325	Attribute trustPosixOffset .....	142
2.326	Attribute trustType .....	142
2.327	Attribute uASCompat .....	143
2.328	Attribute uid .....	143
2.329	Attribute uidNumber .....	144
2.330	Attribute uNCName .....	144
2.331	Attribute unicodePwd .....	144
2.332	Attribute uniqueIdentifier .....	145
2.333	Attribute uniqueMember .....	145
2.334	Attribute unixHomeDirectory .....	145
2.335	Attribute unixUserPassword .....	146
2.336	Attribute unstructuredAddress .....	146
2.337	Attribute unstructuredName .....	146
2.338	Attribute upgradeProductCode .....	147
2.339	Attribute uPNSuffixes .....	147
2.340	Attribute url .....	148
2.341	Attribute userAccountControl .....	148
2.342	Attribute userCert .....	148
2.343	Attribute userCertificate .....	149
2.344	Attribute userClass .....	149
2.345	Attribute userParameters .....	150
2.346	Attribute userPassword .....	150
2.347	Attribute userPKCS12 .....	151
2.348	Attribute userPrincipalName .....	151
2.349	Attribute userSharedFolder .....	152
2.350	Attribute userSharedFolderOther .....	152
2.351	Attribute userSMIMECertificate .....	152
2.352	Attribute userWorkstations .....	153
2.353	Attribute uSNChanged .....	153
2.354	Attribute uSNCreated .....	154
2.355	Attribute uSNSALastObjRemoved .....	154
2.356	Attribute USNIntersite .....	155
2.357	Attribute uSNLastObjRem .....	155
2.358	Attribute uSNSource .....	156
2.359	Attribute validAccesses .....	156
2.360	Attribute vendor .....	156
2.361	Attribute versionNumber .....	157
2.362	Attribute versionNumberHi .....	157
2.363	Attribute versionNumberLo .....	157
2.364	Attribute volTableGUID .....	158
2.365	Attribute volTableIdxGUID .....	158
2.366	Attribute volumeCount .....	158
2.367	Attribute wbemPath .....	159
2.368	Attribute wellKnownObjects .....	159
2.369	Attribute whenChanged .....	160
2.370	Attribute whenCreated .....	160
2.371	Attribute winsockAddresses .....	161
2.372	Attribute WWWHomePage .....	161
2.373	Attribute x121Address .....	162
2.374	Attribute x500uniqueIdentifier .....	162
<b>3</b>	<b>Index .....</b>	<b>163</b>

# 1 References

This section contains the references that are used in this document.

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](mailto:dochelp@microsoft.com). We will assist you in finding the relevant information. Please check the archive site, <http://msdn2.microsoft.com/en-us/library/E4BD6494-06AD-4aed-9823-445E921C9624>, as an additional source.

[MS-ADSC] Microsoft Corporation, "[Active Directory Schema Classes](#)", July 2006.

[MS-ADTS] Microsoft Corporation, "[Active Directory Technical Specification](#)", July 2006.

[MS-DRSR] Microsoft Corporation, "[Directory Replication Service \(DRS\) Remote Protocol Specification](#)", July 2006.

[MS-DTYP] Microsoft Corporation, "[Windows Data Types](#)", March 2007.

[MS-LSAD] Microsoft Corporation, "[Local Security Authority \(Domain Policy\) Remote Protocol Specification](#)", July 2006.

[MS-NRPC] Microsoft Corporation, "[Netlogon Remote Protocol Specification](#)", July 2006.

[MS-SAMR] Microsoft Corporation, "[Security Account Manager \(SAM\) Remote Protocol Specification \(Client-to-Server\)](#)", July 2006.

[MSDN-PACKAGE-FLAGS] Microsoft Corporation, "Package-Flags", <http://msdn2.microsoft.com/en-us/library/ms679099.aspx>

If you have any trouble finding [MSDN-PACKAGE-FLAGS], please check [here](#).

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

[RFC2307] Howard, L., "An Approach for Using LDAP as a Network Information Service", RFC 2307, March 1998, <http://www.ietf.org/rfc/rfc2307.txt>

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

[X121] ITU-T, "Public data networks - Network aspects - International numbering plan for public data networks", Recommendation X.121, October 2000, <http://www.itu.int/rec/T-REC-X.121/en>

[X400] ITU-T, "Message handling systems - Message handling system and service overview", Recommendation F.400/X.400, June 1999, <http://www.itu.int/rec/T-REC-X.400/en>

[X500] ITU-T, "Information Technology - Open Systems Interconnection - The Directory: Overview of Concepts, Models and Services", Recommendation X.500, August 2005, <http://www.itu.int/rec/T-REC-X.500-200508-I/en>

**Note** There is a charge to download the specification.

[X509] ITU-T, "Information Technology - Open Systems Interconnection - The Directory: Public-Key and Attribute Certificate Frameworks", Recommendation X.509, August 2005,  
<http://www.itu.int/rec/T-REC-X.509/en>

**Note** There is a charge to download the specification.

## 2 Attributes

The following sections specify attributes in the Active Directory schema whose names start with the letters N through Z.

**Note** Lines of text in the attribute definitions that are excessively long have been "folded" in accordance with [RFC2849](#) Note 2.

### 2.1 Attribute name

This attribute specifies the relative distinguished name of an object. The relative distinguished name is the part of the object name that is an attribute of the object itself. Also known as the naming attribute. See the glossary entry for **distinguished name** in [MS-ADTS](#) section 1.1.2.

```
cn: RDN
ldapDisplayName: name
attributeId: 1.2.840.113556.1.4.1
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967a0e-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE| fANR | fATTINDEX
rangeLower: 1
rangeUpper: 255
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 33282
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.2 Attribute nameServiceFlags

This attribute specifies the configuration flags for RPC name service.

```
cn: Name-Service-Flags
ldapDisplayName: nameServiceFlags
attributeId: 1.2.840.113556.1.4.753
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 80212840-4bdc-11d1-a9c4-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.3 Attribute nCName

This attribute specifies the distinguished name of the naming context (NC) for the object. See [\[MS-ADTS\]](#) section 7.1, "Special Objects and Forest Invariants", for more details on usage.

```
cn: NC-Name
ldapDisplayName: nCName
attributeId: 1.2.840.113556.1.2.16
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: bf9679d6-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.4 Attribute nETBIOSName

This attribute specifies the name of the object to be used over NetBIOS.

```
cn: NETBIOS-Name
ldapDisplayName: nETBIOSName
attributeId: 1.2.840.113556.1.4.87
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf9679d8-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 1
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.5 Attribute netbootAllowNewClients

The netboot-Allow-New-Clients attribute is reserved for internal use.

```
cn: netboot-Allow-New-Clients
ldapDisplayName: netbootAllowNewClients
attributeId: 1.2.840.113556.1.4.849
attributeSyntax: 2.5.5.8
```

```
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 07383076-91df-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.6 Attribute netbootAnswerOnlyValidClients

This attribute specifies whether the server answers all computers or only pre-staged client computers.

```
cn: netboot-Answer-Only-Valid-Clients
ldapDisplayName: netbootAnswerOnlyValidClients
attributeId: 1.2.840.113556.1.4.854
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 0738307b-91df-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.7 Attribute netbootAnswerRequests

This attribute specifies the RIS server to accept any RIS requests.

```
cn: netboot-Answer-Requests
ldapDisplayName: netbootAnswerRequests
attributeId: 1.2.840.113556.1.4.853
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 0738307a-91df-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.8 Attribute netbootCurrentClientCount

The netboot-Current-Client-Count attribute is reserved for internal use.

```
cn: netboot-Current-Client-Count
```

```
ldapDisplayName: netbootCurrentClientCount
attributeId: 1.2.840.113556.1.4.852
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 07383079-91df-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.9 Attribute netbootGUID

This attribute specifies the diskless boot: Machine on-board GUID. Corresponds to the computer's network card MAC address.

```
cn: Netboot-GUID
ldapDisplayName: netbootGUID
attributeId: 1.2.840.113556.1.4.359
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 3e978921-8c01-11d0-afda-00c04fd930c9
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 16
rangeUpper: 16
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.10 Attribute netbootInitialization

This attribute specifies the default boot path for diskless boot.

```
cn: Netboot-Initialization
ldapDisplayName: netbootInitialization
attributeId: 1.2.840.113556.1.4.358
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 3e978920-8c01-11d0-afda-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.11 Attribute netbootIntelliMirrorOSes

The netboot-IntelliMirror-OSes attribute is reserved for internal use.

```
cn: netboot-IntelliMirror-OSes
ldapDisplayName: netbootIntelliMirrorOSes
attributeId: 1.2.840.113556.1.4.857
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 0738307e-91df-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.12 Attribute netbootLimitClients

The netboot-Limit-Clients attribute is reserved for internal use.

```
cn: netboot-Limit-Clients
ldapDisplayName: netbootLimitClients
attributeId: 1.2.840.113556.1.4.850
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 07383077-91df-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.13 Attribute netbootLocallyInstalledOSes

The netboot-Locally-Installed-OSes attribute is reserved for internal use.

```
cn: netboot-Locally-Installed-OSes
ldapDisplayName: netbootLocallyInstalledOSes
attributeId: 1.2.840.113556.1.4.859
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 07383080-91df-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.



## 2.14 Attribute netbootMachineFilePath

This attribute specifies the server that answers the client. In Windows Server 2003, it can indicate the startrom that the client gets.

```
cn: Netboot-Machine-File-Path
ldapDisplayName: netbootMachineFilePath
attributeId: 1.2.840.113556.1.4.361
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 3e978923-8c01-11d0-afda-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.15 Attribute netbootMaxClients

The netboot-Max-Clients attribute is reserved for internal use.

```
cn: netboot-Max-Clients
ldapDisplayName: netbootMaxClients
attributeId: 1.2.840.113556.1.4.851
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 07383078-91df-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.16 Attribute netbootMirrorDataFile

The Netboot-Mirror-Data-File attribute is reserved for internal use.

```
cn: Netboot-Mirror-Data-File
ldapDisplayName: netbootMirrorDataFile
attributeId: 1.2.840.113556.1.4.1241
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 2df90d85-009f-11d2-aa4c-00c04fd7d83a
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.17 Attribute netbootNewMachineNamingPolicy

This attribute specifies the naming scheme that new client computer accounts will use.

```
cn: netboot-New-Machine-Naming-Policy
ldapDisplayName: netbootNewMachineNamingPolicy
attributeId: 1.2.840.113556.1.4.855
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 0738307c-91df-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.18 Attribute netbootNewMachineOU

This attribute specifies where the new client computer account will be created.

```
cn: netboot-New-Machine-OU
ldapDisplayName: netbootNewMachineOU
attributeId: 1.2.840.113556.1.4.856
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 0738307d-91df-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.19 Attribute netbootSCPBL

This attribute specifies a list of service connection points that reference this netboot server.

```
cn: netboot-SCP-BL
ldapDisplayName: netbootSCPBL
attributeId: 1.2.840.113556.1.4.864
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 07383082-91df-11d1-aebc-0000f80367c1
systemOnly: TRUE
searchFlags: 0
```

```
linkID: 101
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, the following attributes are defined differently:

```
isSingleValued: TRUE
```

## 2.20 Attribute netbootServer

This attribute specifies the distinguished name of a netboot server.

```
cn: netboot-Server
ldapDisplayName: netbootServer
attributeId: 1.2.840.113556.1.4.860
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 07383081-91df-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
linkID: 100
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.21 Attribute netbootSIFFile

The Netboot-SIF-File attribute is reserved for internal use.

```
cn: Netboot-SIF-File
ldapDisplayName: netbootSIFFile
attributeId: 1.2.840.113556.1.4.1240
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 2df90d84-009f-11d2-aa4c-00c04fd7d83a
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.22 Attribute netbootTools

The netboot-Tools attribute is reserved for internal use.

```
cn: netboot-Tools
ldapDisplayName: netbootTools
attributeId: 1.2.840.113556.1.4.858
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 0738307f-91df-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.23 Attribute networkAddress

This attribute specifies the TCP/IP address for a network segment. Also called the subnet address. Used by Active Directory (AD) in the Configuration NC to associate with sites. See [\[MS-ADTS\]](#) section 7.1, "Special Objects and Forest Invariants", for information on how this object is used.

```
cn: Network-Address
ldapDisplayName: networkAddress
attributeId: 1.2.840.113556.1.2.459
attributeSyntax: 2.5.5.4
omSyntax: 20
isSingleValued: FALSE
schemaIdGuid: bf9679d9-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 256
mapiID: 33136
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.24 Attribute nextLevelStore

This attribute specifies the next class store to search.

```
cn: Next-Level-Store
ldapDisplayName: nextLevelStore
attributeId: 1.2.840.113556.1.4.214
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: bf9679da-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.25 Attribute nextRid

This attribute specifies the **Next Rid** field used by the mixed mode allocator. See [\[MS-SAMR\]](#) and [\[MS-DRSR\]](#) for more information on how RID pools are defined.

```
cn: Next-Rid
ldapDisplayName: nextRid
attributeId: 1.2.840.113556.1.4.88
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf9679db-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.26 Attribute nisMapEntry

This attribute specifies one map entry of a non-standard map. Not used by the Active Directory service.

```
cn: NisMapEntry
ldapDisplayName: nisMapEntry
attributeId: 1.3.6.1.1.1.1.27
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: TRUE
schemaIdGuid: 4a95216e-fcc0-402e-b57f-5971626148a9
systemOnly: FALSE
searchFlags: 0
rangeUpper: 1024
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2 and Windows Server 2008.

## 2.27 Attribute nisMapName

The attribute contains the name of the map to which the object belongs. Not used by the Active Directory service.

```
cn: NisMapName
ldapDisplayName: nisMapName
attributeId: 1.3.6.1.1.1.1.26
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: TRUE
```

```
schemaIdGuid: 969d3c79-0e9a-4d95-b0ac-bdde7ff8f3a1
systemOnly: FALSE
searchFlags: 0
rangeUpper: 1024
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2 and Windows Server 2008.

## 2.28 Attribute nisNetgroupTriple

This attribute specifies one entry from a netgroup map. Not used by the Active Directory service.

```
cn: NisNetgroupTriple
ldapDisplayName: nisNetgroupTriple
attributeId: 1.3.6.1.1.1.1.14
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: a8032e74-30ef-4ff5-affc-0fc217783fec
systemOnly: FALSE
searchFlags: 0
rangeUpper: 153600
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2 and Windows Server 2008.

## 2.29 Attribute nonSecurityMember

This attribute specifies non-security members of a group. Used for Microsoft Exchange Server distribution lists.

```
cn: Non-Security-Member
ldapDisplayName: nonSecurityMember
attributeId: 1.2.840.113556.1.4.530
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 52458018-ca6a-11d0-afff-0000f80367c1
systemOnly: FALSE
searchFlags: 0
linkID: 50
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.30 Attribute nonSecurityMemberBL

This attribute specifies the list of non-security members for an Exchange Server distribution list.

```
cn: Non-Security-Member-BL
ldapDisplayName: nonSecurityMemberBL
attributeId: 1.2.840.113556.1.4.531
```

```
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 52458019-ca6a-11d0-afff-0000f80367c1
systemOnly: TRUE
searchFlags: 0
linkID: 51
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.31 Attribute notes

This attribute specifies a free text field for general-purpose notes on an object. Not used by the Active Directory service.

```
cn: Additional-Information
ldapDisplayName: notes
attributeId: 1.2.840.113556.1.4.265
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 6d05fb41-246b-11d0-a9c8-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeUpper: 32768
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

On Windows 2000 Server, rangeUpper is not defined.

### 2.32 Attribute notificationList

The Notification-List attribute is not currently used.

```
cn: Notification-List
ldapDisplayName: notificationList
attributeId: 1.2.840.113556.1.4.303
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 19195a56-6da0-11d0-afd3-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.33 Attribute nTGroupMembers

This attribute is not used.

```
cn: NT-Group-Members
ldapDisplayName: nTGroupMembers
attributeId: 1.2.840.113556.1.4.89
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: bf9679df-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.34 Attribute nTMixedDomain

This attribute specifies whether the domain is in native mode or mixed mode. This attribute is found in the domainDNS (head) object for the domain. For more information on how AD uses this attribute, refer to [\[MS-ADTS\]](#) section 7.1.4.1.

```
cn: NT-Mixed-Domain
ldapDisplayName: nTMixedDomain
attributeId: 1.2.840.113556.1.4.357
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 3e97891f-8c01-11d0-afda-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.35 Attribute ntPwdHistory

This attribute specifies the password history of the user in Windows NT one-way format (OWF). Windows 2000 uses the Windows NT OWF. For more information about usage, refer to [\[MS-ADTS\]](#) and [\[MS-SAMR\]](#).

```
cn: Nt-Pwd-History
ldapDisplayName: ntPwdHistory
attributeId: 1.2.840.113556.1.4.94
```



```

attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: bf9679e2-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.36 Attribute nTSecurityDescriptor

This attribute specifies the Windows NT security descriptor for an object. For more information about how AD uses this attribute, refer to [\[MS-ADTS\]](#) section 5.1.

```

cn: NT-Security-Descriptor
ldapDisplayName: nTSecurityDescriptor
attributeId: 1.2.840.113556.1.2.281
attributeSyntax: 2.5.5.15
omSyntax: 66
isSingleValued: TRUE
schemaIdGuid: bf9679e3-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
rangeLower: 0
rangeUpper: 132096
mapiID: 32787
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_OPERATIONAL |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, the following attributes are defined differently:

```

systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER

```

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.37 Attribute o

This attribute specifies the name of the company or organization. Not used by the Active Directory service.

```

cn: Organization-Name

```

```

ldapDisplayName: o
attributeId: 2.5.4.10
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: bf9679ef-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 33025
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.38 Attribute objectCategory

This attribute specifies an object class name that is used to group objects of this or derived classes. Every object in Active Directory has this attribute. See [\[MS-ADTS\]](#) for more information about how Active Directory uses this attribute.

```

cn: Object-Category
ldapDisplayName: objectCategory
attributeId: 1.2.840.113556.1.4.782
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 26d97369-6070-11d1-a9c6-0000f80367c1
systemOnly: FALSE
searchFlags: fATTINDEX
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.39 Attribute objectClass

This attribute specifies the list of classes of which this object is an instance. It equals [attributeSchema](#). See [\[MS-ADTS\]](#) section 3.1.1.2.4.3 for information about how this attribute is used.

```

cn: Object-Class
ldapDisplayName: objectClass
attributeId: 2.5.4.0
attributeSyntax: 2.5.5.2
omSyntax: 6
isSingleValued: FALSE
schemaIdGuid: bf9679e5-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.40 Attribute objectClassCategory

This attribute specifies the class type, such as abstract, auxiliary, or structured. See [\[MS-ADTS\]](#) for how this attribute is used by the Active Directory service.

```

cn: Object-Class-Category
ldapDisplayName: objectClassCategory
attributeId: 1.2.840.113556.1.2.370
attributeSyntax: 2.5.5.9
omSyntax: 10
isSingleValued: TRUE
schemaIdGuid: bf9679e6-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
rangeLower: 0
rangeUpper: 3
mapiID: 33014
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.41 Attribute objectClasses

This attribute specifies a multivalued property containing strings that represent each class in the schema. Each value contains the governsID, LDAPDisplayName, mustContain, mayContain, and so on. For more information, refer to [\[MS-ADTS\]](#) section 3.1.1.3.1.1.1.

```

cn: Object-Classes
ldapDisplayName: objectClasses
attributeId: 2.5.21.6

```

```

attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 9a7ad94b-ca53-11d1-bbd0-0080c76670c0
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.42 Attribute objectCount

This attribute specifies the tracked file quota for a given volume. See "Originating Updates" in [\[MS-ADTS\]](#) for information on quota tracking.

```

cn: Object-Count
ldapDisplayName: objectCount
attributeId: 1.2.840.113556.1.4.506
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 34aaa216-b699-11d0-afee-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.43 Attribute objectGUID

This attribute specifies the unique identifier for an object. The GUID data type is defined in [\[MS-DTYP\]](#) section 2.3.2. GUID usage by the Active Directory service is defined in [\[MS-ADTS\]](#), in particular in section [3.1.1.1.3](#).

```

cn: Object-Guid
ldapDisplayName: objectGUID
attributeId: 1.2.840.113556.1.4.2
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf9679e7-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE | fATTINDEX
rangeLower: 16
rangeUpper: 16
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 35949
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |

```

```
FLAG_ATTR_REQ_PARTIAL_SET_MEMBER | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.44 Attribute objectSid

This attribute specifies a binary value that specifies the security identifier (SID) of the user. The SID is a unique value used to identify the user as a security principal. For more information on the SID data type, refer to [\[MS-DTYP\]](#) section 2.4.2. SID usage is also discussed in [\[MS-ADTS\]](#), in particular in section [3.1.1.1.3](#).

```
cn: Object-Sid
ldapDisplayName: objectSid
attributeId: 1.2.840.113556.1.4.146
attributeSyntax: 2.5.5.17
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf9679e8-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE | fATTINDEX
rangeLower: 0
rangeUpper: 28
attributeSecurityGuid: 59ba2f42-79a2-11d0-9020-00c04fc2d3cf
mapiID: 32807
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, the following attributes are defined differently:

```
systemOnly: FALSE
```

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.45 Attribute objectVersion

This attribute specifies a generic store for a version number for the object. Active Directory uses this attribute for a few operations. Refer to [\[MS-ADTS\]](#) section 3.1.1.2.1 for more information.

```
cn: Object-Version
ldapDisplayName: objectVersion
attributeId: 1.2.840.113556.1.2.76
attributeSyntax: 2.5.5.9
omSyntax: 2
```

```
isSingleValued: TRUE
schemaIdGuid: 16775848-47f3-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
mapiID: 33015
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.46 Attribute oEMInformation

This attribute specifies OEM information. It is no longer used, and is included here for backwards compatibility.

```
cn: OEM-Information
ldapDisplayName: oEMInformation
attributeId: 1.2.840.113556.1.4.151
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf9679ea-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
attributeSecurityGuid: b8119fd0-04f6-4762-ab7a-4986c76b3f9a
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute attributeSecurityGuid is not defined.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.47 Attribute oObjectClass

This attribute specifies the unique object ID (OID) for the attribute or class. See [\[MS-ADTS\]](#) section 3.1.1.2.2.2, "LDAP Representation", for information on how this object is used by the Active Directory service.

```
cn: OM-Object-Class
ldapDisplayName: oObjectClass
attributeId: 1.2.840.113556.1.2.218
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf9679ec-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
```

```
searchFlags: 0
mapiID: 33021
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.48 Attribute oMSyntax

A number representing the OM type for the attribute. See [\[MS-ADTS\]](#) section 3.1.1.2.2.2, "LDAP Representation", for information on how this object is used by the Active Directory service.

```
cn: OM-Syntax
ldapDisplayName: oMSyntax
attributeId: 1.2.840.113556.1.2.231
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf9679ed-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE
mapiID: 33022
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.49 Attribute oMTGuid

This attribute specifies the unique identifier for a Link-Track-Object-Move table entry.

```
cn: OMT-Guid
ldapDisplayName: oMTGuid
attributeId: 1.2.840.113556.1.4.505
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: ddac0cf3-af8f-11d0-afeb-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.50 Attribute oMTIndxGuid

This attribute specifies the index identifier for a Link-Track-Object-Move table entry.

```
cn: OMT-Indx-Guid
ldapDisplayName: oMTIndxGuid
attributeId: 1.2.840.113556.1.4.333
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 1f0075fa-7e40-11d0-afd6-00c04fd930c9
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 0
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.51 Attribute oncRpcNumber

This attribute specifies a part of the RPC map and stores the RPC number for UNIX RPCs.

```
cn: OncRpcNumber
ldapDisplayName: oncRpcNumber
attributeId: 1.3.6.1.1.1.1.18
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 966825f5-01d9-4a5c-a011-d15ae84efa55
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2 and Windows Server 2008.

## 2.52 Attribute operatingSystem

This attribute specifies the operating system name (for example, Windows NT). See [\[MS-NRPC\]](#) sections [2.2.1.3.5](#), [2.2.1.3.13](#), and [2.2.1.3.14](#) for more information on how clients use these attributes in Active Directory.

```
cn: Operating-System
ldapDisplayName: operatingSystem
attributeId: 1.2.840.113556.1.4.363
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 3e978925-8c01-11d0-afda-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```



Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.53 Attribute operatingSystemHotfix

This attribute specifies the hotfix level of the operating system.

```
cn: Operating-System-Hotfix
ldapDisplayName: operatingSystemHotfix
attributeId: 1.2.840.113556.1.4.415
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bd951b3c-9c96-11d0-afdd-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.54 Attribute operatingSystemServicePack

This attribute specifies the operating system service pack ID string (for example, SP3).

```
cn: Operating-System-Service-Pack
ldapDisplayName: operatingSystemServicePack
attributeId: 1.2.840.113556.1.4.365
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 3e978927-8c01-11d0-afda-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.55 Attribute operatingSystemVersion

This attribute specifies the operating system version string (for example, 4.0). See [\[MS-NRPC\]](#) sections [2.2.1.3.5](#), [2.2.1.3.13](#), and [2.2.1.3.14](#) for more information on how clients use these attributes in Active Directory.

```
cn: Operating-System-Version
ldapDisplayName: operatingSystemVersion
attributeId: 1.2.840.113556.1.4.364
attributeSyntax: 2.5.5.12
```

```
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 3e978926-8c01-11d0-afda-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.56 Attribute operatorCount

This attribute specifies the **Operator-Count** attribute. It is part of the mandatory User\Group properties (see [\[MS-ADTS\]](#) for more information). This attribute is not used by the Active Directory service.

```
cn: Operator-Count
ldapDisplayName: operatorCount
attributeId: 1.2.840.113556.1.4.144
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf9679ee-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.57 Attribute optionDescription

This attribute specifies a description of an option that is set on the DHCP server.

```
cn: Option-Description
ldapDisplayName: optionDescription
attributeId: 1.2.840.113556.1.4.712
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 963d274d-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.58 Attribute options

This attribute specifies a bit field, where the meaning of the bits varies from objectClass to objectClass. Can occur on Inter-Site-Transport, NTDS-Connection, NTDS-DSA, NTDS-Site-Settings, and Site-Link objects. See [\[MS-DRSR\]](#) and [\[MS-ADTS\]](#) more for information.

```
cn: Options
ldapDisplayName: options
attributeId: 1.2.840.113556.1.4.307
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 19195a53-6da0-11d0-afd3-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.59 Attribute optionsLocation

This attribute specifies the options location for the DHCP server, and contains the distinguished name (DN) for alternate sites that contain the options information.

```
cn: Options-Location
ldapDisplayName: optionsLocation
attributeId: 1.2.840.113556.1.4.713
attributeSyntax: 2.5.5.5
omSyntax: 19
isSingleValued: FALSE
schemaIdGuid: 963d274e-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.60 Attribute organizationalStatus

The organizationalStatus attribute specifies a category by which a person is often referred to in an organization. This attribute is not used in the Active Directory service, but it is part of the X.500 schema, as described in [\[RFC1274\]](#).

```
cn: organizationalStatus
ldapDisplayName: organizationalStatus
attributeId: 0.9.2342.19200300.100.1.45
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
```

```
schemaIdGuid: 28596019-7349-4d2f-adff-5a629961f942
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 256
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.61 Attribute **originalDisplayTable**

This attribute specifies the MAPI (original) display table for an address entry. Not used by the Active Directory service.

```
cn: Original-Display-Table
ldapDisplayName: originalDisplayTable
attributeId: 1.2.840.113556.1.2.445
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 5fd424ce-1262-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 32768
mapiID: 33027
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.62 Attribute **originalDisplayTableMSDOS**

This attribute specifies the MAPI (original) display table for an MS-DOS address entry. Not used by the Active Directory service.

```
cn: Original-Display-Table-MSDOS
ldapDisplayName: originalDisplayTableMSDOS
attributeId: 1.2.840.113556.1.2.214
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 5fd424cf-1262-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 32768
mapiID: 33028
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.63 Attribute otherFacsimileTelephoneNumber

This attribute specifies a list of alternate facsimile numbers.

```
cn: Phone-Fax-Other
ldapDisplayName: otherFacsimileTelephoneNumber
attributeId: 1.2.840.113556.1.4.646
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 0296c11d-40da-11d1-a9c0-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.64 Attribute otherHomePhone

This attribute specifies a list of alternate home phone numbers.

```
cn: Phone-Home-Other
ldapDisplayName: otherHomePhone
attributeId: 1.2.840.113556.1.2.277
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: f0f8ffa2-1191-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapID: 14895
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.65 Attribute otherIpPhone

This attribute specifies a list of alternate TCP/IP addresses for the phone. Used by telephony.

```
cn: Phone-Ip-Other
ldapDisplayName: otherIpPhone
attributeId: 1.2.840.113556.1.4.722
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 4d146e4b-48d4-11d1-a9c3-0000f80367c1
```

```
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.66 Attribute otherLoginWorkstations

This attribute specifies non-Windows NT or LAN Manager workstations from which a user can log on. Note that Active Directory does not use or populate this field.

```
cn: Other-Login-Workstations
ldapDisplayName: otherLoginWorkstations
attributeId: 1.2.840.113556.1.4.91
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: bf9679f1-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
rangeLower: 0
rangeUpper: 1024
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.67 Attribute otherMailbox

This attribute specifies other additional mail addresses in a form such as CCMail: JeffSmith.

```
cn: Other-Mailbox
ldapDisplayName: otherMailbox
attributeId: 1.2.840.113556.1.4.651
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 0296c123-40da-11d1-a9c0-0000f80367c1
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.68 Attribute otherMobile

This attribute specifies a list of alternate cell phone numbers.

```
cn: Phone-Mobile-Other
ldapDisplayName: otherMobile
attributeId: 1.2.840.113556.1.4.647
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 0296c11e-40da-11d1-a9c0-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.69 Attribute otherPager

This attribute specifies a list of alternate pager numbers.

```
cn: Phone-Pager-Other
ldapDisplayName: otherPager
attributeId: 1.2.840.113556.1.2.118
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: f0f8ffa4-1191-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 35950
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.70 Attribute otherTelephone

This attribute specifies a list of alternate office phone numbers.

```
cn: Phone-Office-Other
ldapDisplayName: otherTelephone
attributeId: 1.2.840.113556.1.2.18
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: f0f8ffa5-1191-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 64
```

```
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 14875
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.71 Attribute otherWellKnownObjects

This attribute specifies a list of containers by GUID and distinguished name. This permits retrieving an object after it has been moved by using just the GUID and the domain name. Whenever the object is moved, the system will automatically update the distinguished name. See [\[MS-ADTS\]](#) section 7.1, "Special Objects and Forest Invariants".

```
cn: Other-Well-Known-Objects
ldapDisplayName: otherWellKnownObjects
attributeId: 1.2.840.113556.1.4.1359
attributeSyntax: 2.5.5.7
omSyntax: 127
omObjectClass: 1.2.840.113556.1.1.1.11
isSingleValued: FALSE
schemaIdGuid: 1ea64e5d-ac0f-11d2-90df-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
rangeLower: 16
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute rangeLower and rangeUpper are not defined.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.72 Attribute ou

This attribute specifies the name of the organizational unit. When used as a component of a directory name, it identifies an organizational unit with which the named object is affiliated.

```
cn: Organizational-Unit-Name
ldapDisplayName: ou
attributeId: 2.5.4.11
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: bf9679f0-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 33026
```



```
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.73 Attribute owner

This attribute specifies the name of some object that has some responsibility for the associated object. An attribute value for owner is a distinguished name (which could represent a group of names) and can recur.

```
cn: Owner
ldapDisplayName: owner
attributeId: 2.5.4.32
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: bf9679f3-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
linkID: 44
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.74 Attribute ownerBL

This attribute specifies the back-link to the owner attribute. Contains a list of owners for an object.

```
cn: ms-Exch-Owner-BL
ldapDisplayName: ownerBL
attributeId: 1.2.840.113556.1.2.104
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: bf9679f4-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
linkID: 45
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.75 Attribute packageFlags

This attribute specifies a bit field that contains the deployment state flags for an application. This attribute can be 0 or a combination of one or more of the values listed in [\[MSDN-PACKAGE-FLAGS\]](#).

```
cn: Package-Flags
ldapDisplayName: packageFlags
attributeId: 1.2.840.113556.1.4.327
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 7d6c0e99-7e20-11d0-afd6-00c04fd930c9
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.76 Attribute packageName

This attribute specifies the deployment name for an application.

```
cn: Package-Name
ldapDisplayName: packageName
attributeId: 1.2.840.113556.1.4.326
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 7d6c0e98-7e20-11d0-afd6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.77 Attribute packageType

This attribute specifies the type of installation required for an application package. For example, MSI, EXE, CAB.

```
cn: Package-Type
ldapDisplayName: packageType
attributeId: 1.2.840.113556.1.4.324
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 7d6c0e96-7e20-11d0-afd6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.78 Attribute pager

This attribute specifies the primary pager number.

```
cn: Phone-Pager-Primary
ldapDisplayName: pager
attributeId: 0.9.2342.19200300.100.1.42
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: f0f8ffa6-1191-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 14881
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.79 Attribute parentCA

This attribute specifies the distinguished name of a CA object for a parent certificate authority.

```
cn: Parent-CA
ldapDisplayName: parentCA
attributeId: 1.2.840.113556.1.4.557
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 5245801b-ca6a-11d0-afff-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.80 Attribute parentCACertificateChain

This attribute specifies the DER-encoded X509v3 certificate [\[X509\]](#) for a parent certificate authority.

```
cn: Parent-CA-Certificate-Chain
ldapDisplayName: parentCACertificateChain
attributeId: 1.2.840.113556.1.4.685
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
```

```
schemaIdGuid: 963d2733-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.81 Attribute parentGUID

This attribute specifies a constructed attribute, invented to support the DirSync control. It holds the objectGuid of an object's parent when replicating an object's creation, rename, or move.

```
cn: Parent-GUID
ldapDisplayName: parentGUID
attributeId: 1.2.840.113556.1.4.1224
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 2df90d74-009f-11d2-aa4c-00c04fd7d83a
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.82 Attribute partialAttributeDeletionList

This attribute specifies the internal replication state of partial replicas (that is, on global catalogs (GCs)). Attribute of the partial replica NC object. Used when the GC is in the process of removing attributes from the objects in its partial replica NCs.

```
cn: Partial-Attribute-Deletion-List
ldapDisplayName: partialAttributeDeletionList
attributeId: 1.2.840.113556.1.4.663
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 28630ec0-41d5-11d1-a9c1-0000f80367c1
systemOnly: TRUE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.83 Attribute partialAttributeSet

This attribute specifies the internal replication state of partial replicas (that is, on GCs). Attribute of the partial replica NC object. Defines the set of attributes present on a particular partial replica NC. See [\[MS-DRSR\]](#) section 5.128 for more information on Active Directory service usage.

```
cn: Partial-Attribute-Set
ldapDisplayName: partialAttributeSet
attributeId: 1.2.840.113556.1.4.640
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 19405b9e-3cfa-11d1-a9c0-0000f80367c1
systemOnly: TRUE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.84 Attribute pekKeyChangeInterval

This attribute specifies the password encryption key change interval. For more information, refer to [\[MS-SAMR\]](#).

```
cn: Pek-Key-Change-Interval
ldapDisplayName: pekKeyChangeInterval
attributeId: 1.2.840.113556.1.4.866
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 07383084-91df-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.85 Attribute pekList

This attribute specifies a list of password encryption keys. For more information, refer to [\[MS-SAMR\]](#).

```
cn: Pek-List
ldapDisplayName: pekList
```

```
attributeId: 1.2.840.113556.1.4.865
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 07383083-91df-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.86 Attribute pendingCACertificates

This attribute specifies the certificates that are about to become effective for this certificate authority.

```
cn: Pending-CA-Certificates
ldapDisplayName: pendingCACertificates
attributeId: 1.2.840.113556.1.4.693
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 963d273c-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.87 Attribute pendingParentCA

This attribute specifies the reference to the certificate authorities that issued the pending certificates for this certificate authority.

```
cn: Pending-Parent-CA
ldapDisplayName: pendingParentCA
attributeId: 1.2.840.113556.1.4.695
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 963d273e-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.88 Attribute perMsgDialogDisplayTable

This attribute specifies the per message options MAPI display table. This is not used by the Active Directory service.

```
cn: Per-Msg-Dialog-Display-Table
ldapDisplayName: perMsgDialogDisplayTable
attributeId: 1.2.840.113556.1.2.325
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 5fd424d3-1262-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 32768
mapiID: 33032
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.89 Attribute perRecipDialogDisplayTable

This attribute specifies the per recipient options MAPI display table. This is not used by the Active Directory service.

```
cn: Per-Recip-Dialog-Display-Table
ldapDisplayName: perRecipDialogDisplayTable
attributeId: 1.2.840.113556.1.2.326
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 5fd424d4-1262-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 32768
mapiID: 33033
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.90 Attribute personalTitle

This attribute specifies the user's title.

```
cn: Personal-Title
ldapDisplayName: personalTitle
attributeId: 1.2.840.113556.1.2.615
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 16775858-47f3-11d1-a9c3-0000f80367c1
systemOnly: FALSE
```

```
searchFlags: 0
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 35947
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.91 Attribute photo

This attribute specifies an object encoded in G3 fax as explained in recommendation T.4, with an ASN.1 wrapper to make it compatible with an X.400 BodyPart as defined in X.420.

```
cn: photo
ldapDisplayName: photo
attributeId: 0.9.2342.19200300.100.1.7
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 9c979768-bala-4c08-9632-c6a5c1ed649a
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.92 Attribute physicalDeliveryOfficeName

This attribute specifies the office location in the user's place of business.

```
cn: Physical-Delivery-Office-Name
ldapDisplayName: physicalDeliveryOfficeName
attributeId: 2.5.4.19
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf9679f7-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fANR | fATTINDEX
rangeLower: 1
rangeUpper: 128
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 14873
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.



## 2.93 Attribute physicalLocationObject

This attribute specifies a map from a device (for example, printer, computer, and so on) to a physical location.

```
cn: Physical-Location-Object
ldapDisplayName: physicalLocationObject
attributeId: 1.2.840.113556.1.4.514
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: b7b13119-b82e-11d0-afee-0000f80367c1
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.94 Attribute pKICriticalExtensions

This attribute specifies a list of critical extensions in the certificate template.

```
cn: PKI-Critical-Extensions
ldapDisplayName: pKICriticalExtensions
attributeId: 1.2.840.113556.1.4.1330
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: fc5a9106-3b9d-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.95 Attribute pKIDefaultCSPs

This attribute specifies a list of cryptographic service providers for the certificate template.

```
cn: PKI-Default-CSPs
ldapDisplayName: pKIDefaultCSPs
attributeId: 1.2.840.113556.1.4.1334
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 1ef6336e-3b9e-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
```

```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.96 Attribute pKIDefaultKeySpec

This attribute specifies the private key specification for the certificate template.

```
cn: PKI-Default-Key-Spec
ldapDisplayName: pKIDefaultKeySpec
attributeId: 1.2.840.113556.1.4.1327
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 426cae6e-3b9d-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.97 Attribute pKIEnrollmentAccess

The PKI-Enrollment-Access attribute is for internal use only.

```
cn: PKI-Enrollment-Access
ldapDisplayName: pKIEnrollmentAccess
attributeId: 1.2.840.113556.1.4.1335
attributeSyntax: 2.5.5.15
omSyntax: 66
isSingleValued: FALSE
schemaIdGuid: 926be278-56f9-11d2-90d0-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.98 Attribute pKIExpirationPeriod

This attribute specifies the validity period for the certificate template.

```
cn: PKI-Expiration-Period
ldapDisplayName: pKIExpirationPeriod
attributeId: 1.2.840.113556.1.4.1331
attributeSyntax: 2.5.5.10
omSyntax: 4
```

```
isSingleValued: TRUE
schemaIdGuid: 041570d2-3b9e-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.99 Attribute pKIExtendedKeyUsage

This attribute specifies the enhanced key usage OIDs for the certificate template.

```
cn: PKI-Extended-Key-Usage
ldapDisplayName: pKIExtendedKeyUsage
attributeId: 1.2.840.113556.1.4.1333
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 18976af6-3b9e-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.100 Attribute pKIKeyUsage

This attribute specifies the key usage extension for the certificate template.

```
cn: PKI-Key-Usage
ldapDisplayName: pKIKeyUsage
attributeId: 1.2.840.113556.1.4.1328
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: e9b0a87e-3b9d-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.101 Attribute pKIMaxIssuingDepth

This attribute specifies the maximum length of the certificate chain issued by the certificate.

```
cn: PKI-Max-Issuing-Depth
ldapDisplayName: pKIMaxIssuingDepth
attributeId: 1.2.840.113556.1.4.1329
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: f0bfdefa-3b9d-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.102 Attribute pKIOverlapPeriod

This attribute specifies the period during which the certificate should be renewed before it is expired.

```
cn: PKI-Overlap-Period
ldapDisplayName: pKIOverlapPeriod
attributeId: 1.2.840.113556.1.4.1332
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 1219a3ec-3b9e-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.103 Attribute pKT

This attribute specifies the DFS Partition Knowledge Table. Describes the structure of a Distributed File System (DFS) hierarchy.

```
cn: PKT
ldapDisplayName: pKT
attributeId: 1.2.840.113556.1.4.206
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 8447f9f1-1027-11d0-a05f-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeUpper: 10485760
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute rangeUpper is not defined.

### 2.104 Attribute pKTGuid

This attribute specifies the unique ID of a given DFS Partition Knowledge Table.

```
cn: PKT-Guid
ldapDisplayName: pKTGuid
attributeId: 1.2.840.113556.1.4.205
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 8447f9f0-1027-11d0-a05f-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 16
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.105 Attribute policyReplicationFlags

Although this attribute is present in the schema, it is not used in Windows.

```
cn: Policy-Replication-Flags
ldapDisplayName: policyReplicationFlags
attributeId: 1.2.840.113556.1.4.633
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 19405b96-3cfa-11d1-a9c0-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.106 Attribute portName

This attribute specifies a list of port names, for example, for printer ports or COM ports. This attribute is not used by the Active Directory service.

```
cn: Port-Name
ldapDisplayName: portName
attributeId: 1.2.840.113556.1.4.228
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 281416c4-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
```

```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.107 Attribute possibleInferiors

This attribute specifies the list of objects that this object can contain. See [\[MS-ADTS\]](#) section 3.1.1.4.5.21 for more information on Active Directory usage.

```
cn: Possible-Inferiors
ldapDisplayName: possibleInferiors
attributeId: 1.2.840.113556.1.4.915
attributeSyntax: 2.5.5.2
omSyntax: 6
isSingleValued: FALSE
schemaIdGuid: 9a7ad94c-ca53-11d1-bbd0-0080c76670c0
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.108 Attribute possSuperiors

This attribute specifies the list of objects that can contain this class. See [\[MS-ADTS\]](#) for more information on Active Directory usage.

```
cn: Poss-Superiors
ldapDisplayName: possSuperiors
attributeId: 1.2.840.113556.1.2.8
attributeSyntax: 2.5.5.2
omSyntax: 6
isSingleValued: FALSE
schemaIdGuid: bf9679fa-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.109 Attribute postalAddress

This attribute specifies the mailing address for the object.

```
cn: Postal-Address
ldapDisplayName: postalAddress
attributeId: 2.5.4.16
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: bf9679fc-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
rangeLower: 1
rangeUpper: 4096
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 33036
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.110 Attribute postalCode

This attribute specifies the postal or ZIP code for mail delivery.

```
cn: Postal-Code
ldapDisplayName: postalCode
attributeId: 2.5.4.17
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf9679fd-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
rangeLower: 1
rangeUpper: 40
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 14890
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.111 Attribute postOfficeBox

This attribute specifies the post office box number for this object.

```
cn: Post-Office-Box
ldapDisplayName: postOfficeBox
attributeId: 2.5.4.18
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
```

```
schemaIdGuid: bf9679fb-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
rangeLower: 1
rangeUpper: 40
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 14891
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.112 Attribute preferredDeliveryMethod

This attribute specifies the X.500-preferred way to deliver to the addressee, as specified in [\[X500\]](#).

```
cn: Preferred-Delivery-Method
ldapDisplayName: preferredDeliveryMethod
attributeId: 2.5.4.28
attributeSyntax: 2.5.5.9
omSyntax: 10
isSingleValued: FALSE
schemaIdGuid: bf9679fe-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 33037
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.113 Attribute preferredLanguage

This attribute specifies the preferred written or spoken language for a person.

```
cn: preferredLanguage
ldapDisplayName: preferredLanguage
attributeId: 2.16.840.1.113730.3.1.39
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 856be0d0-18e7-46e1-8f5f-7ee4d9020e0d
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.114 Attribute preferredOU

This attribute specifies the organizational unit to show by default on the user's desktop.



```
cn: Preferred-OU
ldapDisplayName: preferredOU
attributeId: 1.2.840.113556.1.4.97
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: bf9679ff-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.115 Attribute prefixMap

The Prefix-Map attribute is for internal use only.

```
cn: Prefix-Map
ldapDisplayName: prefixMap
attributeId: 1.2.840.113556.1.4.538
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 52458022-ca6a-11d0-afff-0000f80367c1
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.116 Attribute presentationAddress

This attribute specifies a presentation address associated with an object representing an OSI application entity.

```
cn: Presentation-Address
ldapDisplayName: presentationAddress
attributeId: 2.5.4.29
attributeSyntax: 2.5.5.13
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.732
isSingleValued: TRUE
schemaIdGuid: a8df744b-c5ea-11d1-bbcb-0080c76670c0
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.117 Attribute `previousCACertificates`

This attribute specifies the last expired certificate for this certificate authority.

```
cn: Previous-CA-Certificates
ldapDisplayName: previousCACertificates
attributeId: 1.2.840.113556.1.4.692
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 963d2739-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.118 Attribute `previousParentCA`

This attribute specifies a reference to the certificate authorities that issued the last expired certificate for a certificate authority.

```
cn: Previous-Parent-CA
ldapDisplayName: previousParentCA
attributeId: 1.2.840.113556.1.4.694
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 963d273d-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.119 Attribute `primaryGroupID`

This attribute specifies the relative identifier (RID) for the primary group of the user. By default, this is the RID for the Domain Users group. For more information, refer to [\[MS-SAMR\]](#) section 3.2.1.8.2 and [\[MS-ADTS\]](#).

```
cn: Primary-Group-ID
ldapDisplayName: primaryGroupID
attributeId: 1.2.840.113556.1.4.98
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
```

```

schemaIdGuid: bf967a00-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY| fATTINDEX
attributeSecurityGuid: 59ba2f42-79a2-11d0-9020-00c04fc2d3cf
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.120 Attribute primaryGroupToken

This attribute specifies a computed attribute that is used in retrieving the membership list of a group such as Domain Users. The complete membership of such groups is not stored explicitly for scaling reasons. For more information refer to [\[MS-ADTS\]](#) section 3.1.1.4.5.11 and [\[MS-SAMR\]](#).

```

cn: Primary-Group-Token
ldapDisplayName: primaryGroupToken
attributeId: 1.2.840.113556.1.4.1412
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: c0ed8738-7efd-4481-84d9-66d2db8be369
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.121 Attribute primaryInternationalISDNNumber

This attribute specifies the primary ISDN number.

```

cn: Phone-ISDN-Primary
ldapDisplayName: primaryInternationalISDNNumber
attributeId: 1.2.840.113556.1.4.649
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 0296c11f-40da-11d1-a9c0-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1

```

```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.122 Attribute **primaryTelexNumber**

This attribute specifies the primary telex number.

```
cn: Telex-Primary
ldapDisplayName: primaryTelexNumber
attributeId: 1.2.840.113556.1.4.648
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 0296c121-40da-11d1-a9c0-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.123 Attribute **printAttributes**

This attribute specifies a bitmask of printer attributes.

```
cn: Print-Attributes
ldapDisplayName: printAttributes
attributeId: 1.2.840.113556.1.4.247
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 281416d7-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.124 Attribute **printBinNames**

This attribute specifies a list of printer bin names.

```
cn: Print-Bin-Names
ldapDisplayName: printBinNames
attributeId: 1.2.840.113556.1.4.237
attributeSyntax: 2.5.5.12
```

```
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 281416cd-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.125 Attribute printCollate

This attribute specifies whether a printer has collating bins.

```
cn: Print-Collate
ldapDisplayName: printCollate
attributeId: 1.2.840.113556.1.4.242
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 281416d2-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.126 Attribute printColor

This attribute specifies whether a printer can print in color.

```
cn: Print-Color
ldapDisplayName: printColor
attributeId: 1.2.840.113556.1.4.243
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 281416d3-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.127 Attribute printDuplexSupported

This attribute specifies the type of duplex support a printer has.

```
cn: Print-Duplex-Supported
```

```
ldapDisplayName: printDuplexSupported
attributeId: 1.2.840.113556.1.4.1311
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 281416cc-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.128 Attribute printEndTime

This attribute specifies the time a print queue stops servicing jobs.

```
cn: Print-End-Time
ldapDisplayName: printEndTime
attributeId: 1.2.840.113556.1.4.234
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 281416ca-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.129 Attribute printerName

This attribute specifies the display name of an attached printer.

```
cn: Printer-Name
ldapDisplayName: printerName
attributeId: 1.2.840.113556.1.4.300
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 244b296e-5abd-11d0-afd2-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.130 Attribute printFormName

This attribute specifies the name of the currently loaded form.

```
cn: Print-Form-Name
ldapDisplayName: printFormName
attributeId: 1.2.840.113556.1.4.235
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 281416cb-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.131 Attribute printKeepPrintedJobs

This attribute specifies if printed jobs are kept.

```
cn: Print-Keep-Printed-Jobs
ldapDisplayName: printKeepPrintedJobs
attributeId: 1.2.840.113556.1.4.275
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: ba305f6d-47e3-11d0-a1a6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.132 Attribute printLanguage

This attribute specifies the supported page description language (for example, PostScript, PCL).

```
cn: Print-Language
ldapDisplayName: printLanguage
attributeId: 1.2.840.113556.1.4.246
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 281416d6-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 256
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.133 Attribute printMACAddress

This attribute specifies the user-supplied MAC address.

```
cn: Print-MAC-Address
ldapDisplayName: printMACAddress
attributeId: 1.2.840.113556.1.4.288
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: ba305f7a-47e3-11d0-a1a6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.134 Attribute printMaxCopies

This attribute specifies the maximum number of copies a device can print.

```
cn: Print-Max-Copies
ldapDisplayName: printMaxCopies
attributeId: 1.2.840.113556.1.4.241
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 281416d1-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.135 Attribute printMaxResolutionSupported

This attribute specifies the maximum printer resolution.

```
cn: Print-Max-Resolution-Supported
ldapDisplayName: printMaxResolutionSupported
attributeId: 1.2.840.113556.1.4.238
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 281416cf-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
```



```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.136 Attribute printMaxXExtent

This attribute specifies the maximum horizontal print region.

```
cn: Print-Max-X-Extent
ldapDisplayName: printMaxXExtent
attributeId: 1.2.840.113556.1.4.277
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ba305f6f-47e3-11d0-a1a6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.137 Attribute printMaxYExtent

This attribute specifies the maximum vertical print region.

```
cn: Print-Max-Y-Extent
ldapDisplayName: printMaxYExtent
attributeId: 1.2.840.113556.1.4.278
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ba305f70-47e3-11d0-a1a6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.138 Attribute printMediaReady

This attribute specifies a list of available media for a printer.

```
cn: Print-Media-Ready
ldapDisplayName: printMediaReady
attributeId: 1.2.840.113556.1.4.289
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 3bcbfcf5-4d3d-11d0-a1a6-00c04fd930c9
```

```
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute `isMemberOfPartialAttributeSet` is not defined.

### 2.139 Attribute `printMediaSupported`

This attribute specifies a list of media supported by a printer.

```
cn: Print-Media-Supported
ldapDisplayName: printMediaSupported
attributeId: 1.2.840.113556.1.4.299
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 244b296f-5abd-11d0-afd2-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.140 Attribute `printMemory`

This attribute specifies the amount of memory installed in a printer.

```
cn: Print-Memory
ldapDisplayName: printMemory
attributeId: 1.2.840.113556.1.4.282
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ba305f74-47e3-11d0-a1a6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.141 Attribute `printMinXExtent`

This attribute specifies the minimum horizontal print region.

```
cn: Print-Min-X-Extent
```

```
ldapDisplayName: printMinXExtent
attributeId: 1.2.840.113556.1.4.279
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ba305f71-47e3-11d0-a1a6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.142 Attribute printMinYExtent

This attribute specifies the minimum vertical print region.

```
cn: Print-Min-Y-Extent
ldapDisplayName: printMinYExtent
attributeId: 1.2.840.113556.1.4.280
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ba305f72-47e3-11d0-a1a6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.143 Attribute printNetworkAddress

This attribute specifies the user-supplied network address.

```
cn: Print-Network-Address
ldapDisplayName: printNetworkAddress
attributeId: 1.2.840.113556.1.4.287
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: ba305f79-47e3-11d0-a1a6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.144 Attribute printNotify

This attribute specifies a user-supplied string specifying the notification contact.

```
cn: Print-Notify
ldapDisplayName: printNotify
attributeId: 1.2.840.113556.1.4.272
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: ba305f6a-47e3-11d0-a1a6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.145 Attribute printNumberUp

This attribute specifies the number of page images per sheet.

```
cn: Print-Number-Up
ldapDisplayName: printNumberUp
attributeId: 1.2.840.113556.1.4.290
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 3bcbfcf4-4d3d-11d0-a1a6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.146 Attribute printOrientationsSupported

This attribute specifies the page rotation for landscape printing.

```
cn: Print-Orientations-Supported
ldapDisplayName: printOrientationsSupported
attributeId: 1.2.840.113556.1.4.240
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 281416d0-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 256
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.147 Attribute printOwner

This attribute specifies a user-supplied owner string.

```
cn: Print-Owner
ldapDisplayName: printOwner
attributeId: 1.2.840.113556.1.4.271
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: ba305f69-47e3-11d0-a1a6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.148 Attribute printPagesPerMinute

This attribute specifies the driver-supplied print rate in pages per minute.

```
cn: Print-Pages-Per-Minute
ldapDisplayName: printPagesPerMinute
attributeId: 1.2.840.113556.1.4.631
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 19405b97-3cfa-11d1-a9c0-0000f80367c1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.149 Attribute printRate

This attribute specifies the driver-supplied print rate.

```
cn: Print-Rate
ldapDisplayName: printRate
attributeId: 1.2.840.113556.1.4.285
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ba305f77-47e3-11d0-a1a6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.150 Attribute **printRateUnit**

This attribute specifies the driver-supplied print rate unit.

```
cn: Print-Rate-Unit
ldapDisplayName: printRateUnit
attributeId: 1.2.840.113556.1.4.286
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: ba305f78-47e3-11d0-a1a6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute `isMemberOfPartialAttributeSet` is not defined.

## 2.151 Attribute **printSeparatorFile**

This attribute specifies the file path of the printer separator page.

```
cn: Print-Separator-File
ldapDisplayName: printSeparatorFile
attributeId: 1.2.840.113556.1.4.230
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 281416c6-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.152 Attribute **printShareName**

This attribute specifies the printer's share name.

```
cn: Print-Share-Name
ldapDisplayName: printShareName
attributeId: 1.2.840.113556.1.4.270
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: ba305f68-47e3-11d0-a1a6-00c04fd930c9
systemOnly: FALSE
```

```
searchFlags: 0
memberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.153 Attribute printSpooling

This attribute specifies a string representing the type of printer spooling.

```
cn: Print-Spooling
ldapDisplayName: printSpooling
attributeId: 1.2.840.113556.1.4.274
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: ba305f6c-47e3-11d0-a1a6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.154 Attribute printStaplingSupported

This attribute specifies if the printer supports stapling. It is supplied by the driver.

```
cn: Print-Stapling-Supported
ldapDisplayName: printStaplingSupported
attributeId: 1.2.840.113556.1.4.281
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: ba305f73-47e3-11d0-a1a6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
memberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.155 Attribute printStartTime

This attribute specifies the time a print queue begins servicing jobs.

```
cn: Print-Start-Time
ldapDisplayName: printStartTime
attributeId: 1.2.840.113556.1.4.233
attributeSyntax: 2.5.5.9
```

```
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 281416c9-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.156 Attribute printStatus

This attribute specifies the status from the print spooler. Currently unused.

```
cn: Print-Status
ldapDisplayName: printStatus
attributeId: 1.2.840.113556.1.4.273
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: ba305f6b-47e3-11d0-a1a6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.157 Attribute priority

This attribute specifies the current priority (of a process, print job, and so on).

```
cn: Priority
ldapDisplayName: priority
attributeId: 1.2.840.113556.1.4.231
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 281416c7-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.158 Attribute priorSetTime

This attribute specifies the previous time set for a secret.

```
cn: Prior-Set-Time
ldapDisplayName: priorSetTime
```



```
attributeId: 1.2.840.113556.1.4.99
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf967a01-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.159 Attribute priorValue

This attribute specifies the previous value for a secret.

```
cn: Prior-Value
ldapDisplayName: priorValue
attributeId: 1.2.840.113556.1.4.100
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf967a02-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.160 Attribute privateKey

This attribute specifies an encrypted private key.

```
cn: Private-Key
ldapDisplayName: privateKey
attributeId: 1.2.840.113556.1.4.101
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf967a03-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.161 Attribute privilegeAttributes

This attribute specifies a bitmask of privilege attributes.

```
cn: Privilege-Attributes
ldapDisplayName: privilegeAttributes
attributeId: 1.2.840.113556.1.4.636
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 19405b9a-3cfa-11d1-a9c0-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.162 Attribute privilegeDisplayName

This attribute specifies a display name for a Windows NT privilege.

```
cn: Privilege-Display-Name
ldapDisplayName: privilegeDisplayName
attributeId: 1.2.840.113556.1.4.634
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 19405b98-3cfa-11d1-a9c0-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.163 Attribute privilegeHolder

This attribute specifies a list of distinguished names of principals that are granted this privilege.

```
cn: Privilege-Holder
ldapDisplayName: privilegeHolder
attributeId: 1.2.840.113556.1.4.637
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 19405b9b-3cfa-11d1-a9c0-0000f80367c1
systemOnly: FALSE
```

```
searchFlags: 0
linkID: 70
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.164 Attribute privilegeValue

This attribute specifies a value representing a Windows NT privilege.

```
cn: Privilege-Value
ldapDisplayName: privilegeValue
attributeId: 1.2.840.113556.1.4.635
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 19405b99-3cfa-11d1-a9c0-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.165 Attribute productCode

This attribute specifies a unique identifier for an application for a particular product release, represented as a string GUID, for example, "{12345678-1234-1234-1234-123456789012}". Letters used in this GUID must be uppercase. This ID must vary for different versions and languages.

```
cn: Product-Code
ldapDisplayName: productCode
attributeId: 1.2.840.113556.1.4.818
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: d9e18317-8939-11d1-aebe-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.166 Attribute profilePath

This attribute specifies a path to the user's profile. This value can be a null string, a local absolute path, or a UNC path.

```
cn: Profile-Path
ldapDisplayName: profilePath
attributeId: 1.2.840.113556.1.4.139
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967a05-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
attributeSecurityGuid: 5f202010-79a5-11d0-9020-00c04fc2d4cf
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.167 Attribute proxiedObjectName

This attribute specifies an internal tracking object used by Active Directory to help track interdomain moves.

```
cn: Proxied-Object-Name
ldapDisplayName: proxiedObjectName
attributeId: 1.2.840.113556.1.4.1249
attributeSyntax: 2.5.5.7
omSyntax: 127
omObjectClass: 1.2.840.113556.1.1.1.11
isSingleValued: TRUE
schemaIdGuid: e1aea402-cd5b-11d0-afff-0000f80367c1
systemOnly: TRUE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
             FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.168 Attribute proxyAddresses

A proxy address is the address by which an Exchange Server recipient object is recognized in a foreign mail system. Proxy addresses are required for all recipient objects, such as custom recipients and distribution lists.

```
cn: Proxy-Addresses
ldapDisplayName: proxyAddresses
attributeId: 1.2.840.113556.1.2.210
attributeSyntax: 2.5.5.12
omSyntax: 64
```

```
isSingleValued: FALSE
schemaIdGuid: bf967a06-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fANR | fATTINDEX
rangeLower: 1
rangeUpper: 1123
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 32783
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.169 Attribute proxyGenerationEnabled

This attribute specifies whether proxy generation is enabled.

```
cn: Proxy-Generation-Enabled
ldapDisplayName: proxyGenerationEnabled
attributeId: 1.2.840.113556.1.2.523
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 5fd424d6-1262-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
mapiID: 33201
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.170 Attribute proxyLifetime

This attribute specifies the lifetime for a proxy object.

```
cn: Proxy-Lifetime
ldapDisplayName: proxyLifetime
attributeId: 1.2.840.113556.1.4.103
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf967a07-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.171 Attribute publicKeyPolicy

This attribute specifies a reference to the public key policy for this domain.

```
cn: Public-Key-Policy
ldapDisplayName: publicKeyPolicy
attributeId: 1.2.840.113556.1.4.420
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 80a67e28-9f22-11d0-afdd-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: a29b89fd-c7e8-11d0-9bae-00c04fd92ef5
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.172 Attribute purportedSearch

This attribute specifies the search argument for an address book view.

```
cn: Purported-Search
ldapDisplayName: purportedSearch
attributeId: 1.2.840.113556.1.4.886
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: b4b54e50-943a-11d1-aebd-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 2048
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.173 Attribute pwdHistoryLength

This attribute specifies the number of old passwords to save. See [\[MS-SAMR\]](#) and [\[MS-ADTS\]](#) references for more information on how Active Directory uses this attribute.

```
cn: Pwd-History-Length
ldapDisplayName: pwdHistoryLength
attributeId: 1.2.840.113556.1.4.95
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf967a09-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
```

```
searchFlags: 0
rangeLower: 0
rangeUpper: 65535
attributeSecurityGuid: c7407360-20bf-11d0-a768-00aa006e0529
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.174 Attribute pwdLastSet

This attribute specifies the date and time that the password for this account was last changed. This value is stored as a large integer that represents the number of 100 nanosecond intervals since January 1, 1601 (UTC). If this value is set to 0 and the [User-Account-Control](#) attribute does not contain the UF\_DONT\_EXPIRE\_PASSWD flag, the user must set the password at the next logon. See [\[MS-SAMR\]](#) section 3.2.1.8.8 and [\[MS-ADTS\]](#) for more information on how Active Directory uses this attribute.

```
cn: Pwd-Last-Set
ldapDisplayName: pwdLastSet
attributeId: 1.2.840.113556.1.4.96
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf967a0a-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: 4c164200-20c0-11d0-a768-00aa006e0529
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.175 Attribute pwdProperties

This attribute specifies an unsigned long numeric that, bit by bit, is home to several true/false policies, most of which can be configured under the default domain policy Group Policy object's (GPO's) Computer Configuration\Windows Settings\Security Settings\Account Policies>Password Policy folder. For example, the DOMAIN\_PASSWORD\_COMPLEX setting, which can be configured through a GPO's Passwords must meet complexity requirements policy, occupies pwdProperties' first bit. See [\[MS-SAMR\]](#) for more information on bit descriptions.

```
cn: Pwd-Properties
ldapDisplayName: pwdProperties
attributeId: 1.2.840.113556.1.4.93
attributeSyntax: 2.5.5.9
omSyntax: 2
```

```
isSingleValued: TRUE
schemaIdGuid: bf967a0b-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: c7407360-20bf-11d0-a768-00aa006e0529
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.176 Attribute qualityOfService

This attribute specifies the local/domain quality of service bits on policy objects. Not used by the Active Directory service.

```
cn: Quality-Of-Service
ldapDisplayName: qualityOfService
attributeId: 1.2.840.113556.1.4.458
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 80a67e4e-9f22-11d0-afdd-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: a29b8a01-c7e8-11d0-9bae-00c04fd92ef5
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.177 Attribute queryFilter

This attribute specifies a Query-Filter. Used by Active Directory administrative tools to store saved queries on display specifiers. Not used by the Active Directory service.

```
cn: Query-Filter
ldapDisplayName: queryFilter
attributeId: 1.2.840.113556.1.4.1355
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: cbf70a26-7e78-11d2-9921-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.



## 2.178 Attribute queryPoint

This attribute specifies the URL or UNC of a query page or other front-end for accessing a catalog.

```
cn: QueryPoint
ldapDisplayName: queryPoint
attributeId: 1.2.840.113556.1.4.680
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 7bfdcb86-4807-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.179 Attribute queryPolicyBL

This attribute specifies a list of all objects holding references to a given Query-Policy.

```
cn: Query-Policy-BL
ldapDisplayName: queryPolicyBL
attributeId: 1.2.840.113556.1.4.608
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: e1aea404-cd5b-11d0-afff-0000f80367c1
systemOnly: TRUE
searchFlags: 0
linkID: 69
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.180 Attribute queryPolicyObject

This attribute specifies the reference to the default Query-Policy in force for this server.

```
cn: Query-Policy-Object
ldapDisplayName: queryPolicyObject
attributeId: 1.2.840.113556.1.4.607
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: e1aea403-cd5b-11d0-afff-0000f80367c1
systemOnly: FALSE
searchFlags: 0
linkID: 68
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

```
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.181 Attribute rangeLower

This attribute specifies a lower range of values that are allowed for this attribute, and is optional.

For syntax Integer, LargeInteger, Enumeration, String(UTC-time), and String(Generalized-time), rangeLower equals the minimum allowed value. For syntax Object(DN-binary) and Object(DN-String), rangeLower equals the minimum length of the binary\_value or string\_value portion of the given value. For String(Unicode), rangeLower is the minimum length in character. rangeLower is not used on syntax Boolean and Object(DS-DN). For all other syntaxes, rangeLower equals the minimum length in bytes. Note that rangeLower is a 32-bit integer and cannot express the full range of LargeInteger, String(UTC-time), and String(Generalized-time).

```
cn: Range-Lower
ldapDisplayName: rangeLower
attributeId: 1.2.840.113556.1.2.34
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf967a0c-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
mapID: 33043
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.182 Attribute rangeUpper

This attribute specifies an upper range of values that are allowed for this attribute, and is optional.

For syntax Integer, LargeInteger, Enumeration, String(UTC-time), and String(Generalized-time), rangeUpper equals the maximum allowed value. For syntax Object(DN-binary) and Object(DN-String), rangeUpper equals the maximum length of the binary\_value or string\_value portion of the given value. For String(Unicode), rangeUpper is the minimum length in character. rangeUpper is not used on syntax Boolean and Object(DS-DN). For all other syntaxes, rangeUpper equals the maximum length in bytes. Note that rangeUpper is a 32-bit integer and cannot express the full range of LargeInteger, String(UTC-time), and String(Generalized-time).

```
cn: Range-Upper
ldapDisplayName: rangeUpper
attributeId: 1.2.840.113556.1.2.35
```

```
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf967a0d-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
mapiID: 33044
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.183 Attribute rDNAttID

This attribute specifies the attributeId of the **RDN** attribute. If not defined, it will be inherited from the superclass of this class. See [\[MS-ADTS\]](#) for more information.

```
cn: RDN-Att-ID
ldapDisplayName: rDNAttID
attributeId: 1.2.840.113556.1.2.26
attributeSyntax: 2.5.5.2
omSyntax: 6
isSingleValued: TRUE
schemaIdGuid: bf967a0f-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.184 Attribute registeredAddress

This attribute specifies a mnemonic for an address associated with an object at a particular city location. The mnemonic is registered in the country/region in which the city is located and is used in the provision of the Public Telegram Service.

```
cn: Registered-Address
ldapDisplayName: registeredAddress
attributeId: 2.5.4.26
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: bf967a10-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
```

```
rangeUpper: 4096
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 33049
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.185 Attribute remoteServerName

This attribute specifies where one or more machine names must be stored.

```
cn: Remote-Server-Name
ldapDisplayName: remoteServerName
attributeId: 1.2.840.113556.1.4.105
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: bf967a12-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.186 Attribute remoteSource

This attribute specifies a back pointer to foreign objects.

```
cn: Remote-Source
ldapDisplayName: remoteSource
attributeId: 1.2.840.113556.1.4.107
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967a14-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 1024
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.187 Attribute remoteSourceType

This attribute specifies a type of pointer to a foreign object.

```
cn: Remote-Source-Type
ldapDisplayName: remoteSourceType
attributeId: 1.2.840.113556.1.4.108
```

```
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf967a15-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.188 Attribute remoteStorageGUID

This attribute specifies the GUID for a remote storage object.

```
cn: Remote-Storage-GUID
ldapDisplayName: remoteStorageGUID
attributeId: 1.2.840.113556.1.4.809
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 2a39c5b0-8960-11d1-aebe-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.189 Attribute replicaSource

This attribute specifies the GUID of a replication source. For more information, refer to [\[MS-DRSR\]](#).

```
cn: Replica-Source
ldapDisplayName: replicaSource
attributeId: 1.2.840.113556.1.4.109
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967a18-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.190 Attribute replInterval

This attribute specifies the attribute of Site-Link objects that defines the interval, in minutes, between replication cycles among the sites in the Site-List. Must be a multiple of 15 minutes (the

granularity of cross-site DS replication), a minimum of 15 minutes, and a maximum of 10,080 minutes (one week). For more information, refer to [\[MS-DRSR\]](#).

```
cn: Repl-Interval
ldapDisplayName: replInterval
attributeId: 1.2.840.113556.1.4.1336
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 45ba9d1a-56fa-11d2-90d0-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.191 Attribute replPropertyMetaData

This attribute specifies the internal replication state information for directory service (DS) objects. Information here can be extracted in public form through the public API DsReplicaGetInfo(). Present on all DS objects. For more information, refer to [\[MS-DRSR\]](#).

```
cn: Repl-Property-Meta-Data
ldapDisplayName: replPropertyMetaData
attributeId: 1.2.840.113556.1.4.3
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 281416c0-1968-11d0-a28f-00aa003049e2
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_OPERATIONAL |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, the following attributes are defined differently.

```
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER | FLAG_ATTR_NOT_REPLICATED
```

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.192 Attribute replTopologyStayOfExecution

This attribute specifies the delay between deleting a server object and it being permanently removed from the replication topology. For more information, refer to [\[MS-DRSR\]](#).

```
cn: Repl-Topology-Stay-Of-Execution
ldapDisplayName: replTopologyStayOfExecution
attributeId: 1.2.840.113556.1.4.677
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 7bfdcb83-4807-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.193 Attribute replUpToDateVector

This attribute specifies the internal replication state information for an entire NC. Information here can be extracted in public form through the API DsReplicaGetInfo(). Present on all NC root objects. For more information, refer to [\[MS-DRSR\]](#) section 5.146.

```
cn: Repl-UpToDate-Vector
ldapDisplayName: replUpToDateVector
attributeId: 1.2.840.113556.1.4.4
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf967a16-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.194 Attribute repsFrom

This attribute specifies a list for the servers from which the directory will accept changes for the defined naming context. For more information, refer to [\[MS-DRSR\]](#) section 5.150.

```
cn: Reps-From
ldapDisplayName: repsFrom
```

```

attributeId: 1.2.840.113556.1.2.91
attributeSyntax: 2.5.5.10
omSyntax: 127
omObjectClass: 1.2.840.113556.1.1.1.6
isSingleValued: FALSE
schemaIdGuid: bf967a1d-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.195 Attribute repsTo

This attribute specifies the list of servers that the directory will notify of changes and servers to which the directory will send changes on request for the defined naming context. For more information, refer to [\[MS-DRSR\]](#) section 5.151.

```

cn: Reps-To
ldapDisplayName: repsTo
attributeId: 1.2.840.113556.1.2.83
attributeSyntax: 2.5.5.10
omSyntax: 127
omObjectClass: 1.2.840.113556.1.1.1.6
isSingleValued: FALSE
schemaIdGuid: bf967a1e-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.196 Attribute requiredCategories

This attribute specifies a list of component category IDs that an object (such as an application) requires to run.

```

cn: Required-Categories
ldapDisplayName: requiredCategories
attributeId: 1.2.840.113556.1.4.321
attributeSyntax: 2.5.5.10
omSyntax: 4

```



```
isSingleValued: FALSE
schemaIdGuid: 7d6c0e93-7e20-11d0-afd6-00c04fd930c9
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 16
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.197 Attribute `retiredReplDSASignatures`

This attribute specifies the past DS replication identities of a given DC. For more information refer to [\[MS-DRSR\]](#).

```
cn: Retired-Repl-DSA-Signatures
ldapDisplayName: retiredReplDSASignatures
attributeId: 1.2.840.113556.1.4.673
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 7bfdcb7f-4807-11d1-a9c3-0000f80367c1
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.198 Attribute `revision`

This attribute specifies the revision level for a security descriptor or other change. Only used in the `sam-server` and `ds-ui-settings` objects. For more information, refer to [\[MS-SAMR\]](#).

```
cn: Revision
ldapDisplayName: revision
attributeId: 1.2.840.113556.1.4.145
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf967a21-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.199 Attribute rid

This attribute specifies the relative identifier (RID) of an object.

```
cn: Rid
ldapDisplayName: rid
attributeId: 1.2.840.113556.1.4.153
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf967a22-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.200 Attribute rIDAllocationPool

This attribute specifies a pool that was prefetched for use by the RID manager when the [RID-Previous-Allocation-Pool](#) has been used up.

```
cn: RID-Allocation-Pool
ldapDisplayName: rIDAllocationPool
attributeId: 1.2.840.113556.1.4.371
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 66171889-8f3c-11d0-afda-00c04fd930c9
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.201 Attribute rIDAvailablePool

This attribute specifies the space from which RID pools are allocated.

```
cn: RID-Available-Pool
ldapDisplayName: rIDAvailablePool
attributeId: 1.2.840.113556.1.4.370
attributeSyntax: 2.5.5.16
omSyntax: 65
```

```
isSingleValued: TRUE
schemaIdGuid: 66171888-8f3c-11d0-afda-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.202 Attribute rIDManagerReference

This attribute specifies the distinguished name for the RID manager of an object.

```
cn: RID-Manager-Reference
ldapDisplayName: rIDManagerReference
attributeId: 1.2.840.113556.1.4.368
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 66171886-8f3c-11d0-afda-00c04fd930c9
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.203 Attribute rIDNextRID

This attribute specifies the next free relative identifier in the current pool.

```
cn: RID-Next-RID
ldapDisplayName: rIDNextRID
attributeId: 1.2.840.113556.1.4.374
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 6617188c-8f3c-11d0-afda-00c04fd930c9
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.204 Attribute rIDPreviousAllocationPool

The RID-Previous-Allocation-Pool attribute contains the pool of relative identifiers (RIDs) that a domain controller allocates from. This attribute is an 8-byte value that contains a pair of 4-byte integers that represent the start and end values of the RID pool. The start value is in the lower four bytes, and the end value is in the upper four bytes.

```
cn: RID-Previous-Allocation-Pool
ldapDisplayName: rIDPreviousAllocationPool
attributeId: 1.2.840.113556.1.4.372
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 6617188a-8f3c-11d0-afda-00c04fd930c9
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.205 Attribute rIDSetReferences

This attribute specifies the list of references to RID-Set objects managing RID allocation.

```
cn: RID-Set-References
ldapDisplayName: rIDSetReferences
attributeId: 1.2.840.113556.1.4.669
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 7bfdcb7b-4807-11d1-a9c3-0000f80367c1
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.206 Attribute rIDUsedPool

This attribute specifies the RID pools that have been used by a DC.

```
cn: RID-Used-Pool
ldapDisplayName: rIDUsedPool
```

```
attributeId: 1.2.840.113556.1.4.373
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 6617188b-8f3c-11d0-afda-00c04fd930c9
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.207 Attribute rightsGuid

This attribute specifies the GUID used to represent an extended right within an access control entry (ACE).

```
cn: Rights-Guid
ldapDisplayName: rightsGuid
attributeId: 1.2.840.113556.1.4.340
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 8297931c-86d3-11d0-afda-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
rangeLower: 36
rangeUpper: 36
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.208 Attribute roleOccupant

The distinguished name of an object that fulfills an organizational role.

```
cn: Role-Occupant
ldapDisplayName: roleOccupant
attributeId: 2.5.4.33
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: a8df7465-c5ea-11d1-bbcb-0080c76670c0
systemOnly: FALSE
searchFlags: 0
mapIID: 33061
```

```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.209 Attribute roomNumber

This attribute specifies the room number of an object.

```
cn: roomNumber
ldapDisplayName: roomNumber
attributeId: 0.9.2342.19200300.100.1.6
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 81d7f8c2-e327-4a0d-91c6-b42d4009115f
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.210 Attribute rootTrust

This attribute specifies the distinguished name of another [Cross-Ref](#).

```
cn: Root-Trust
ldapDisplayName: rootTrust
attributeId: 1.2.840.113556.1.4.674
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 7bfdcb80-4807-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.211 Attribute rpcNsAnnotation

This attribute specifies a string describing a given RPC profile element.

```
cn: rpc-Ns-Annotation
ldapDisplayName: rpcNsAnnotation
attributeId: 1.2.840.113556.1.4.366
attributeSyntax: 2.5.5.12
```

```
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 88611bde-8cf4-11d0-afda-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.212 Attribute `rpcNsBindings`

This attribute specifies the list of RPC bindings for the current interface.

```
cn: rpc-Ns-Bindings
ldapDisplayName: rpcNsBindings
attributeId: 1.2.840.113556.1.4.113
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: bf967a23-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.213 Attribute `rpcNsCodeset`

This attribute specifies the list of character sets supported by a server.

```
cn: rpc-Ns-Codeset
ldapDisplayName: rpcNsCodeset
attributeId: 1.2.840.113556.1.4.367
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 7a0ba0e0-8e98-11d0-afda-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.214 Attribute `rpcNsEntryFlags`

This attribute specifies a flag to indicate that the RPC NS entry was explicitly created.

```
cn: rpc-Ns-Entry-Flags
ldapDisplayName: rpcNsEntryFlags
```

```
attributeId: 1.2.840.113556.1.4.754
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 80212841-4bdc-11d1-a9c4-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.215 Attribute **rpcNsGroup**

This attribute specifies a reference to an RPC server entry or another RPC group.

```
cn: rpc-Ns-Group
ldapDisplayName: rpcNsGroup
attributeId: 1.2.840.113556.1.4.114
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: bf967a24-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.216 Attribute **rpcNsInterfaceID**

This attribute specifies an interface ID supported by a given server.

```
cn: rpc-Ns-Interface-ID
ldapDisplayName: rpcNsInterfaceID
attributeId: 1.2.840.113556.1.4.115
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967a25-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.217 Attribute **rpcNsObjectID**

This attribute specifies the object IDs exported by a given server.



```
cn: rpc-Ns-Object-ID
ldapDisplayName: rpcNsObjectID
attributeId: 1.2.840.113556.1.4.312
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 29401c48-7a27-11d0-afd6-00c04fd930c9
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.218 Attribute **rpcNsPriority**

This attribute specifies the priority of a given RPC profile entry.

```
cn: rpc-Ns-Priority
ldapDisplayName: rpcNsPriority
attributeId: 1.2.840.113556.1.4.117
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: FALSE
schemaIdGuid: bf967a27-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.219 Attribute **rpcNsProfileEntry**

This attribute specifies the list of entries for the current priority.

```
cn: rpc-Ns-Profile-Entry
ldapDisplayName: rpcNsProfileEntry
attributeId: 1.2.840.113556.1.4.118
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967a28-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.220 Attribute **rpcNsTransferSyntax**

This attribute specifies the UUID of the transfer syntax supported by the current entry.

```

cn: rpc-Ns-Transfer-Syntax
ldapDisplayName: rpcNsTransferSyntax
attributeId: 1.2.840.113556.1.4.314
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 29401c4a-7a27-11d0-afd6-00c04fd930c9
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_SCHEMA_BASE_OBJECT

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.221 Attribute sAMAccountName

This attribute specifies the logon name used to support clients and servers running LAN manager and older versions of the operating system, such as Windows NT 4.0, Windows 95, and Windows 98. This attribute must be less than 20 characters to support older clients.

```

cn: SAM-Account-Name
ldapDisplayName: sAMAccountName
attributeId: 1.2.840.113556.1.4.221
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 3e0abfd0-126a-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE| fANR | fATTINDEX
rangeLower: 0
rangeUpper: 256
attributeSecurityGuid: 59ba2f42-79a2-11d0-9020-00c04fc2d3cf
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.222 Attribute sAMAccountType

This attribute specifies information about every account type object. The implementer can enumerate a list of account types, or can use the Display Information API to create a list. Because computers, normal user accounts, and trust accounts can also be enumerated as user objects, the values for these accounts must be a contiguous range. This attribute is defined in the mappings.h file.

The possible values for this attribute are defined in the following table:

Name	Value
SAM_DOMAIN_OBJECT	0x0
SAM_GROUP_OBJECT	0x10000000
SAM_NON_SECURITY_GROUP_OBJECT	0x10000001
SAM_ALIAS_OBJECT	0x20000000
SAM_NON_SECURITY_ALIAS_OBJECT	0x20000001
SAM_USER_OBJECT	0x30000000
SAM_NORMAL_USER_ACCOUNT	0x30000000
SAM_MACHINE_ACCOUNT	0x30000001
SAM_TRUST_ACCOUNT	0x30000002
SAM_APP_BASIC_GROUP	0x40000000
SAM_APP_QUERY_GROUP	0x40000001
SAM_ACCOUNT_TYPE_MAX	0x7fffffff

```

cn: SAM-Account-Type
ldapDisplayName: sAMAccountType
attributeId: 1.2.840.113556.1.4.302
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 6e7b626c-64f2-11d0-afd2-00c04fd930c9
systemOnly: FALSE
searchFlags: fATTINDEX
attributeSecurityGuid: 59ba2f42-79a2-11d0-9020-00c04fc2d3cf
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
             FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.223 Attribute samDomainUpdates

Contains a bitmask of performed SAM operations on Active Directory.

```

cn: SAM-Domain-Updates
ldapDisplayName: samDomainUpdates
attributeId: 1.2.840.113556.1.4.1969
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 04d2d114-f799-4e9b-bcdc-90e8f5ba7ebe

```

```
systemOnly: FALSE
searchFlags: 0
rangeUpper: 1024
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008.

## 2.224 Attribute schedule

This attribute specifies a schedule binary large object (BLOB) as defined by the NT Job Service. Used by replication. Refer to [\[MS-DRSR\]](#) for more information about this structure.

```
cn: Schedule
ldapDisplayName: schedule
attributeId: 1.2.840.113556.1.4.211
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: dd712224-10e4-11d0-a05f-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.225 Attribute schemaFlagsEx

This attribute specifies an integer value that contains flags that define additional properties of the attribute, as shown below. See [\[MS-ADTS\]](#) for more information. This is an optional attribute.

**Note** This attribute can be modified only by the operating system.

The schemaFlagsEx attribute contains bitwise flags. The following value is relevant to schema objects:

- **FLAG\_ATTR\_IS\_CRITICAL:** Specifies that the attribute is not a member of the filtered attribute set even if the fRODCFilteredAttribute ([\[MS-ADTS\]](#) section 3.1.1.2.3.5) is set.

```
cn: Schema-Flags-Ex
ldapDisplayName: schemaFlagsEx
attributeId: 1.2.840.113556.1.4.120
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf967a2b-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

```
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

The FLAG\_ATTR\_IS\_CRITICAL value was implemented in Windows Server 2008.

## 2.226 Attribute schemaIDGUID

This attribute specifies a unique GUID that identifies this attribute, and is used in security descriptors. It is required on an attributeSchema object. If omitted during Add, the server will auto-generate a random GUID. See [\[MS-ADTS\]](#) section 3.1.1.2.3 for more information.

```
cn: Schema-ID-GUID
ldapDisplayName: schemaIDGUID
attributeId: 1.2.840.113556.1.4.148
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf967923-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
rangeLower: 16
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.227 Attribute schemaInfo

This attribute specifies an internal binary value used to detect schema changes between DCs, and force a schema NC replication cycle before replicating any other NC. It is used to resolve ties when the schema FSMO is seized and a change is made on more than one DC.

```
cn: Schema-Info
ldapDisplayName: schemaInfo
attributeId: 1.2.840.113556.1.4.1358
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: f9fb64ae-93b4-11d2-9945-0000f87a57d4
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.228 Attribute schemaUpdate

The Schema-Update attribute is not currently used.

```
cn: Schema-Update
ldapDisplayName: schemaUpdate
attributeId: 1.2.840.113556.1.4.481
attributeSyntax: 2.5.5.11
omSyntax: 24
isSingleValued: TRUE
schemaIdGuid: 1e2d06b4-ac8f-11d0-afe3-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.229 Attribute schemaVersion

This attribute specifies the version number for the schema. Currently not used.

```
cn: Schema-Version
ldapDisplayName: schemaVersion
attributeId: 1.2.840.113556.1.2.471
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: FALSE
schemaIdGuid: bf967a2c-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
mapID: 33148
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.230 Attribute scopeFlags

The Scope-Flags attribute is not currently used.

```
cn: Scope-Flags
ldapDisplayName: scopeFlags
attributeId: 1.2.840.113556.1.4.1354
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 16f3a4c2-7e79-11d2-9921-0000f87a57d4
systemOnly: FALSE
```

```
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.231 Attribute scriptPath

This attribute specifies the path for the user's logon script. The string can be null.

```
cn: Script-Path
ldapDisplayName: scriptPath
attributeId: 1.2.840.113556.1.4.62
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf9679a8-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
attributeSecurityGuid: 5f202010-79a5-11d0-9020-00c04fc2d4cf
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute attributeSecurityGuid is not defined.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.232 Attribute sDRightsEffective

This attribute specifies a constructed attribute that returns a single DWORD value that can have up to three bits set: OWNER\_SECURITY\_INFORMATION, DACL\_SECURITY\_INFORMATION, and SACL\_SECURITY\_INFORMATION. If a bit is set, then the user has write access to the corresponding part of the security descriptor. Owner means both owner and group.

```
cn: SD-Rights-Effective
ldapDisplayName: sDRightsEffective
attributeId: 1.2.840.113556.1.4.1304
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: c3dbafa6-33df-11d2-98b2-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: 59ba2f42-79a2-11d0-9020-00c04fc2d3cf
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.233 Attribute searchFlags

This attribute specifies whether an attribute is indexed among other things. Optional. It contains the following bitwise flags (further defined in [\[MS-ADTS\]](#) section 2.2.9):

- fATTINDEX: \*
- fPDNTATTINDEX: \*
- fANR: Add this attribute to the ambiguous name resolution (ANR) set (if set, then fATTINDEX must be set). See [\[MS-ADTS\]](#) for ANR search.
- fPRESERVEONDELETE: Preserve this attribute on logical deletion. This flag is ignored on link attributes.
- fCOPY: Interpreted by LDAP clients, not by the server. If set, the attribute is copied on object copy.
- fTUPLEINDEX: \*
- fSUBTREEATTINDEX: \*
- fCONFIDENTIAL: This attribute is confidential; special access check is needed. For more information, see [\[MS-ADTS\]](#) section 3.1.1.4.3.

The searchFlags marked \* have an implementation-dependent interpretation defined by Windows. They may be ignored by other implementations, but must not be used in a conflicting way that would affect the performance of Windows DCs.

```
cn: Search-Flags
ldapDisplayName: searchFlags
attributeId: 1.2.840.113556.1.2.334
attributeSyntax: 2.5.5.9
omSyntax: 10
isSingleValued: TRUE
schemaIdGuid: bf967a2d-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
mapID: 33069
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.234 Attribute searchGuide

This attribute specifies information about suggested search criteria that may be included in some entries that are expected to be a convenient base-object for the search operation; for example, country/region or organization.



```
cn: Search-Guide
ldapDisplayName: searchGuide
attributeId: 2.5.4.14
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: bf967a2e-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
mapiID: 33070
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.235 Attribute secretary

This attribute specifies the distinguished name of the secretary for an account.

```
cn: secretary
ldapDisplayName: secretary
attributeId: 0.9.2342.19200300.100.1.21
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 01072d9a-98ad-4a53-9744-e83e287278fb
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.236 Attribute securityIdentifier

This attribute specifies a unique value of variable length used to identify a user account, group account, or logon session to which an ACE applies.

```
cn: Security-Identifier
ldapDisplayName: securityIdentifier
attributeId: 1.2.840.113556.1.4.121
attributeSyntax: 2.5.5.17
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf967a2f-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute `isMemberOfPartialAttributeSet` is not defined.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.237 Attribute `seeAlso`

This attribute specifies a list of distinguished names that are related to an object.

```
cn: See-Also
ldapDisplayName: seeAlso
attributeId: 2.5.4.34
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: bf967a31-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
mapiID: 33071
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.238 Attribute `seqNotification`

This attribute specifies a counter that is incremented daily. This counter value is given to the link tracking service that adds the value to its volumes and link source files when they are refreshed. The domain controller maintains this value.

```
cn: Seq-Notification
ldapDisplayName: seqNotification
attributeId: 1.2.840.113556.1.4.504
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ddac0cf2-af8f-11d0-afeb-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.239 Attribute `serialNumber`

This attribute specifies a part of the X.500 specification [\[X500\]](#). Not used by Active Directory.

```
cn: Serial-Number
ldapDisplayName: serialNumber
attributeId: 2.5.4.5
attributeSyntax: 2.5.5.5
omSyntax: 19
isSingleValued: FALSE
```

```
schemaIdGuid: bf967a32-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 64
mapiID: 33072
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.240 Attribute **serverName**

This attribute specifies the name of a server.

```
cn: Server-Name
ldapDisplayName: serverName
attributeId: 1.2.840.113556.1.4.223
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 09dcb7a0-165f-11d0-a064-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 1024
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.241 Attribute **serverReference**

This attribute specifies a site computer object. Contains the distinguished name of the domain controller in the domain naming context. Refer to [\[MS-DRSR\]](#) and [\[MS-ADTS\]](#) for more information on how Active Directory uses this attribute.

```
cn: Server-Reference
ldapDisplayName: serverReference
attributeId: 1.2.840.113556.1.4.515
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 26d9736d-6070-11d1-a9c6-0000f80367c1
systemOnly: FALSE
searchFlags: 0
linkID: 94
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

```
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.242 Attribute serverReferenceBL

This attribute specifies an object found in the domain naming context. The distinguished name of a computer under the sites folder. Refer to [\[MS-DRSR\]](#) and [\[MS-ADTS\]](#) for more information on how Active Directory uses this attribute.

```
cn: Server-Reference-BL
ldapDisplayName: serverReferenceBL
attributeId: 1.2.840.113556.1.4.516
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 26d9736e-6070-11d1-a9c6-0000f80367c1
systemOnly: TRUE
searchFlags: 0
linkID: 95
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, the following attributes are defined differently.

```
isSingleValued: TRUE
```

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.243 Attribute serverRole

This attribute specifies compatibility with servers that preceded Windows 2000 servers. A computer running Windows NT Server can be a standalone server, a primary domain controller (PDC), or a backup domain controller (BDC).

```
cn: Server-Role
ldapDisplayName: serverRole
attributeId: 1.2.840.113556.1.4.157
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf967a33-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: b8119fd0-04f6-4762-ab7a-4986c76b3f9a
```

```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute `attributeSecurityGuid` is not defined.

## 2.244 Attribute `serverState`

This attribute specifies whether the server is enabled or disabled. A value of 1 indicates that the server is enabled. A value of 2 indicates that the server is disabled. All other values are invalid.

```
cn: Server-State
ldapDisplayName: serverState
attributeId: 1.2.840.113556.1.4.154
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf967a34-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: b8119fd0-04f6-4762-ab7a-4986c76b3f9a
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute `attributeSecurityGuid` is not defined.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.245 Attribute `serviceBindingInformation`

This attribute specifies service-specific binding information in string format.

```
cn: Service-Binding-Information
ldapDisplayName: serviceBindingInformation
attributeId: 1.2.840.113556.1.4.510
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: b7b1311c-b82e-11d0-afee-0000f80367c1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.246 Attribute serviceClassID

This attribute specifies the GUID for the Service class.

```
cn: Service-Class-ID
ldapDisplayName: serviceClassID
attributeId: 1.2.840.113556.1.4.122
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf967a35-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.247 Attribute serviceClassInfo

This attribute specifies the General Service Class information.

```
cn: Service-Class-Info
ldapDisplayName: serviceClassInfo
attributeId: 1.2.840.113556.1.4.123
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: bf967a36-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.248 Attribute serviceClassName

This attribute specifies the string name of the service that an administration point represents.

```
cn: Service-Class-Name
ldapDisplayName: serviceClassName
attributeId: 1.2.840.113556.1.4.509
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: b7b1311d-b82e-11d0-afec-0000f80367c1
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.249 Attribute serviceDNSName

This attribute specifies the DNS name to look up to find a server running this service.

```
cn: Service-DNS-Name
ldapDisplayName: serviceDNSName
attributeId: 1.2.840.113556.1.4.657
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 28630eb8-41d5-11d1-a9c1-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.250 Attribute serviceDNSNameType

This attribute specifies the type of DNS record to look up for this service. For example, A or SRV.

```
cn: Service-DNS-Name-Type
ldapDisplayName: serviceDNSNameType
attributeId: 1.2.840.113556.1.4.659
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 28630eba-41d5-11d1-a9c1-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 256
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.251 Attribute serviceInstanceVersion

This attribute specifies the version of a Winsock service.

```
cn: Service-Instance-Version
ldapDisplayName: serviceInstanceVersion
attributeId: 1.2.840.113556.1.4.199
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf967a37-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
```

```
rangeLower: 0
rangeUpper: 8
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.252 Attribute servicePrincipalName

This attribute specifies a list of principal names used for mutual authentication with an instance of a service on this machine.

```
cn: Service-Principal-Name
ldapDisplayName: servicePrincipalName
attributeId: 1.2.840.113556.1.4.771
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: f3a64788-5306-11d1-a9c5-0000f80367c1
systemOnly: FALSE
searchFlags: fATTINDEX
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.253 Attribute setupCommand

This attribute specifies whether or not a setup command is required to set up this application.

```
cn: Setup-Command
ldapDisplayName: setupCommand
attributeId: 1.2.840.113556.1.4.325
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 7d6c0e97-7e20-11d0-afd6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.



## 2.254 Attribute shadowExpire

This attribute specifies an absolute date to expire an account.

```
cn: ShadowExpire
ldapDisplayName: shadowExpire
attributeId: 1.3.6.1.1.1.1.10
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 75159a00-1fff-4cf4-8bff-4ef2695cf643
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2 and Windows Server 2008.

## 2.255 Attribute shadowFlag

This attribute specifies a part of the shadow map used to store the flag value.

```
cn: ShadowFlag
ldapDisplayName: shadowFlag
attributeId: 1.3.6.1.1.1.1.11
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 8dfeb70d-c5db-46b6-b15e-a4389e6cee9b
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2 and Windows Server 2008.

## 2.256 Attribute shadowInactive

This attribute specifies the number of days before password expiry to warn the user.

```
cn: ShadowInactive
ldapDisplayName: shadowInactive
attributeId: 1.3.6.1.1.1.1.9
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 86871d1f-3310-4312-8efd-af49dcfb2671
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2 and Windows Server 2008.

## 2.257 Attribute shadowLastChange

This attribute specifies the last change of shadow information.

```
cn: ShadowLastChange
ldapDisplayName: shadowLastChange
attributeId: 1.3.6.1.1.1.1.5
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: f8f2689c-29e8-4843-8177-e8b98e15eeac
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2 and Windows Server 2008.

## 2.258 Attribute shadowMax

This attribute specifies the maximum number of days that a password is valid.

```
cn: ShadowMax
ldapDisplayName: shadowMax
attributeId: 1.3.6.1.1.1.1.7
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: f285c952-50dd-449e-9160-3b880d99988d
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2 and Windows Server 2008.

## 2.259 Attribute shadowMin

This attribute specifies the minimum number of days between shadow changes.

```
cn: ShadowMin
ldapDisplayName: shadowMin
attributeId: 1.3.6.1.1.1.1.6
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: a76b8737-e5a1-4568-b057-dc12e04be4b2
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2 and Windows Server 2008.

## 2.260 Attribute shadowWarning

This attribute specifies the number of days before password expiry to warn the user.

```
cn: ShadowWarning
ldapDisplayName: shadowWarning
attributeId: 1.3.6.1.1.1.1.8
attributeSyntax: 2.5.5.9
```

```
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 7ae89c9c-2976-4a46-bb8a-340f88560117
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2 and Windows Server 2008.

## 2.261 Attribute shellContextMenu

This attribute specifies the order number and GUID of the context menu for this object.

```
cn: Shell-Context-Menu
ldapDisplayName: shellContextMenu
attributeId: 1.2.840.113556.1.4.615
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 553fd039-f32e-11d0-b0bc-00c04fd8dca6
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.262 Attribute shellPropertyPages

This attribute specifies the order number and GUID of property pages for managing Active Directory objects. These property pages can be accessed from the Windows shell. For more information, see the document "Extending the User Interface for Directory Objects" [\[MSDN-ExtUserIntDirObj\]](#).

```
cn: Shell-Property-Pages
ldapDisplayName: shellPropertyPages
attributeId: 1.2.840.113556.1.4.563
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 52458039-ca6a-11d0-afff-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.263 Attribute shortServerName

This attribute specifies a compatible server name for print servers that preceded Windows 2000.

```
cn: Short-Server-Name
ldapDisplayName: shortServerName
```

```
attributeId: 1.2.840.113556.1.4.1209
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 45b01501-c419-11d1-bbc9-0080c76670c0
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.264 Attribute showInAddressBook

This attribute specifies which MAPI address books an object will appear. It is usually maintained by the Exchange Recipient Update Service.

```
cn: Show-In-Address-Book
ldapDisplayName: showInAddressBook
attributeId: 1.2.840.113556.1.4.644
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 3e74f60e-3e73-11d1-a9c0-0000f80367c1
systemOnly: FALSE
searchFlags: fCOPY
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.265 Attribute showInAdvancedViewOnly

This attribute specifies whether the attribute is to be visible in the Advanced mode of user interfaces (UIs). Active Directory snap-ins read this attribute.

```
cn: Show-In-Advanced-View-Only
ldapDisplayName: showInAdvancedViewOnly
attributeId: 1.2.840.113556.1.2.169
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: bf967984-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY| fATTINDEX
attributeSecurityGuid: 59ba2f42-79a2-11d0-9020-00c04fc2d3cf
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

```
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.266 Attribute sIDHistory

This attribute specifies previous SIDs used for the object if the object was moved from another domain. Whenever an object is moved from one domain to another, a new SID is created and that new SID becomes the objectSID. The previous SID is added to the sIDHistory property. For more information, refer to [\[MS-DRSR\]](#) section 4.1.2.

```
cn: SID-History
ldapDisplayName: sIDHistory
attributeId: 1.2.840.113556.1.4.609
attributeSyntax: 2.5.5.17
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 17eb4278-d167-11d0-b002-0000f80367c1
systemOnly: FALSE
searchFlags: fATTINDEX
attributeSecurityGuid: 59ba2f42-79a2-11d0-9020-00c04fc2d3cf
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, the following attributes are defined differently.

```
systemOnly: TRUE
```

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.267 Attribute signatureAlgorithms

This attribute specifies the type of algorithm that must be used to decode a digital signature during the authentication process.

```
cn: Signature-Algorithms
ldapDisplayName: signatureAlgorithms
attributeId: 1.2.840.113556.1.4.824
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 2a39c5b2-8960-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
```

```
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.268 Attribute siteGUID

This attribute specifies the unique identifier for a site.

```
cn: Site-GUID
ldapDisplayName: siteGUID
attributeId: 1.2.840.113556.1.4.362
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 3e978924-8c01-11d0-afda-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
rangeLower: 16
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.269 Attribute siteLinkList

This attribute specifies the list of site links that are associated with this bridge.

```
cn: Site-Link-List
ldapDisplayName: siteLinkList
attributeId: 1.2.840.113556.1.4.822
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: d50c2cdd-8951-11d1-aebe-0000f80367c1
systemOnly: FALSE
searchFlags: 0
linkID: 142
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.270 Attribute siteList

This attribute specifies the list of sites connected to this link object.

```
cn: Site-List
ldapDisplayName: siteList
attributeId: 1.2.840.113556.1.4.821
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: d50c2cdc-8951-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
linkID: 144
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.271 Attribute siteObject

This attribute specifies the distinguished name for the site to which this subnet belongs.

```
cn: Site-Object
ldapDisplayName: siteObject
attributeId: 1.2.840.113556.1.4.512
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 3e10944c-c354-11d0-aff8-0000f80367c1
systemOnly: FALSE
searchFlags: 0
linkID: 46
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.272 Attribute siteObjectBL

This attribute specifies the list of distinguished names for subnets that belong to this site.

```
cn: Site-Object-BL
ldapDisplayName: siteObjectBL
attributeId: 1.2.840.113556.1.4.513
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 3e10944d-c354-11d0-aff8-0000f80367c1
```

```
systemOnly: TRUE
searchFlags: 0
linkID: 47
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.273 Attribute siteServer

This attribute specifies the licensing master server for a given site.

```
cn: Site-Server
ldapDisplayName: siteServer
attributeId: 1.2.840.113556.1.4.494
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 1be8f17c-a9ff-11d0-afe2-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.274 Attribute sn

This attribute specifies the family or last name for a user.

```
cn: Surname
ldapDisplayName: sn
attributeId: 2.5.4.4
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967a41-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fANR | fATTINDEX
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 14865
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.



## 2.275 Attribute sPNMappings

This multivalued attribute contains a list of service principal names (SPNs) to show the equivalence of SPN types. The SPN is the name a client uses to uniquely identify an instance of a service. If an implementer installs multiple instances of a service on computers throughout a forest, each instance must have its own SPN. A given service instance can have multiple SPNs if there are multiple names that clients might use for authentication. For example, "ldap/..." SPNs could be mapped so that they are equivalent to "host/..." SPNs. For more information on Active Directory usage, refer to [\[MS-DRSR\]](#) section 4.1.4.2.18.

```
cn: SPN-Mappings
ldapDisplayName: sPNMappings
attributeId: 1.2.840.113556.1.4.1347
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 2ab0e76c-7041-11d2-9905-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.276 Attribute st

This attribute specifies the name of a user's state or province.

```
cn: State-Or-Province-Name
ldapDisplayName: st
attributeId: 2.5.4.8
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967a39-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
rangeLower: 1
rangeUpper: 128
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapIID: 14888
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.277 Attribute street

This attribute specifies the street address.

```
cn: Street-Address
ldapDisplayName: street
attributeId: 2.5.4.9
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967a3a-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
rangeLower: 1
rangeUpper: 1024
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 33082
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.278 Attribute streetAddress

This attribute specifies the user's address.

```
cn: Address
ldapDisplayName: streetAddress
attributeId: 1.2.840.113556.1.2.256
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: f0f8ff84-1191-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 1024
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 14889
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.279 Attribute structuralObjectClass

This attribute specifies a constructed attribute that stores a list of classes contained in a class hierarchy, including abstract classes. This list does contain dynamically linked auxiliary classes.

```
cn: Structural-Object-Class
ldapDisplayName: structuralObjectClass
attributeId: 2.5.21.9
attributeSyntax: 2.5.5.2
omSyntax: 6
isSingleValued: FALSE
schemaIdGuid: 3860949f-f6a8-4b38-9950-81ecb6bc2982
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.280 Attribute subClassOf

This attribute specifies the parent class of a class.

```
cn: Sub-Class-Of
ldapDisplayName: subClassOf
attributeId: 1.2.840.113556.1.2.21
attributeSyntax: 2.5.5.2
omSyntax: 6
isSingleValued: TRUE
schemaIdGuid: bf967a3b-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.281 Attribute subRefs

This attribute specifies a list of subordinate references of a naming context. For more information on subRefs, refer to [\[MS-ADTS\]](#).

```
cn: Sub-Refs
ldapDisplayName: subRefs
attributeId: 1.2.840.113556.1.2.7
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
```

```

isSingleValued: FALSE
schemaIdGuid: bf967a3c-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
mapiID: 33083
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.282 Attribute subSchemaSubEntry

This attribute specifies the distinguished name for the location of the subschema object where a class or attribute is defined.

```

cn: SubSchemaSubEntry
ldapDisplayName: subSchemaSubEntry
attributeId: 2.5.18.10
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 9a7ad94d-ca53-11d1-bbd0-0080c76670c0
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.283 Attribute superiorDNSRoot

This attribute specifies a system attribute that is used for referrals generation.

```

cn: Superior-DNS-Root
ldapDisplayName: superiorDNSRoot
attributeId: 1.2.840.113556.1.4.532
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 5245801d-ca6a-11d0-afff-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.284 Attribute superScopeDescription

This attribute specifies a description for a superscope.

```
cn: Super-Scope-Description
ldapDisplayName: superScopeDescription
attributeId: 1.2.840.113556.1.4.711
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 963d274c-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.285 Attribute superScopes

This attribute specifies all the different scopes used in the DHCP class into a single entity.

```
cn: Super-Scopes
ldapDisplayName: superScopes
attributeId: 1.2.840.113556.1.4.710
attributeSyntax: 2.5.5.5
omSyntax: 19
isSingleValued: FALSE
schemaIdGuid: 963d274b-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.286 Attribute supplementalCredentials

This attribute specifies stored credentials for use in authenticating. The encrypted version of the user's password. This attribute is neither readable nor writable.

```
cn: Supplemental-Credentials
ldapDisplayName: supplementalCredentials
attributeId: 1.2.840.113556.1.4.125
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: bf967a3f-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
```

```
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.287 Attribute supportedApplicationContext

This attribute specifies the object identifier(s) of application context(s) that an OSI application supports.

```
cn: Supported-Application-Context
ldapDisplayName: supportedApplicationContext
attributeId: 2.5.4.30
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 1677588f-47f3-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
mapiID: 33085
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.288 Attribute syncAttributes

This attribute specifies information on the sync objects.

```
cn: Sync-Attributes
ldapDisplayName: syncAttributes
attributeId: 1.2.840.113556.1.4.666
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 037651e4-441d-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.289 Attribute syncMembership

This attribute specifies a list of members contained in a SAM built-in group for synchronization.

```
cn: Sync-Membership
ldapDisplayName: syncMembership
```

```
attributeId: 1.2.840.113556.1.4.665
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 037651e3-441d-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
linkID: 78
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.290 Attribute syncWithObject

This attribute specifies the distinguished name of the object being synchronized for the SAM built-in group/local policy synchronization.

```
cn: Sync-With-Object
ldapDisplayName: syncWithObject
attributeId: 1.2.840.113556.1.4.664
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 037651e2-441d-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.291 Attribute syncWithSID

This attribute specifies the SAM built-in group object/local policy synchronization; this is the local group to which an object corresponds.

```
cn: Sync-With-SID
ldapDisplayName: syncWithSID
attributeId: 1.2.840.113556.1.4.667
attributeSyntax: 2.5.5.17
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 037651e5-441d-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.292 Attribute **systemAuxiliaryClass**

This attribute specifies the governsIds of some of the Auxiliary classes that are linked to this class. These classes contain attributes required for system operation; this attribute cannot be modified. Optional. See [\[MS-ADTS\]](#) section 3.1.1.3.1.1.5 for more information.

```
cn: System-Auxiliary-Class
ldapDisplayName: systemAuxiliaryClass
attributeId: 1.2.840.113556.1.4.198
attributeSyntax: 2.5.5.2
omSyntax: 6
isSingleValued: FALSE
schemaIdGuid: bf967a43-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.293 Attribute **systemFlags**

This attribute specifies an integer value that contains flags that define additional properties of the class. See [\[MS-ADTS\]](#) for more information. Flags that determine specific system operations. Optional. **Note** This attribute cannot be set or modified.

The **systemFlags** attribute contains bitwise flags. The values relevant to the schema objects are the following (further defined in [\[MS-ADTS\]](#) section 2.2.10):

- FLAG\_ATTR\_NOT\_REPLICATED: This attribute is non-replicated.
- FLAG\_ATTR\_REQ\_PARTIAL\_SET\_MEMBER: If set, this attribute is a member of PAS regardless of the value of attribute isMemberof PartialAttributeSet.
- FLAG\_ATTR\_IS\_CONSTRUCTED: This attribute is a constructed attribute.
- FLAG\_ATTR\_IS\_OPERATIONAL: This attribute is an operational attribute, as defined in [\[RFC2251\]](#) section 3.2.1.
- FLAG\_SCHEMA\_BASE\_OBJECT: This attribute is a Category 1 schema attribute.
- FLAG\_ATTR\_IS\_RDN: A hint to the DC that this attribute can be used as an RDN attribute of a class.

```
cn: System-Flags
ldapDisplayName: systemFlags
attributeId: 1.2.840.113556.1.4.375
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: e0fale62-9b45-11d0-afdd-00c04fd930c9
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE
```



```
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.294 Attribute **systemMayContain**

This attribute specifies the list of optional attributes for a class. The list of attributes can only be modified by the system.

```
cn: System-May-Contain
ldapDisplayName: systemMayContain
attributeId: 1.2.840.113556.1.4.196
attributeSyntax: 2.5.5.2
omSyntax: 6
isSingleValued: FALSE
schemaIdGuid: bf967a44-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.295 Attribute **systemMustContain**

This attribute specifies the attributeIds of some of the mandatory attributes of this class. Contains attributes required for system operation; cannot be modified. Optional.

```
cn: System-Must-Contain
ldapDisplayName: systemMustContain
attributeId: 1.2.840.113556.1.4.197
attributeSyntax: 2.5.5.2
omSyntax: 6
isSingleValued: FALSE
schemaIdGuid: bf967a45-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.296 Attribute systemOnly

This attribute specifies a Boolean value that specifies whether only Active Directory can modify the class. System-Only classes can be created or deleted only by the directory system agent.

```
cn: System-Only
ldapDisplayName: systemOnly
attributeId: 1.2.840.113556.1.4.170
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: bf967a46-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.297 Attribute systemPossSuperiors

This attribute specifies the governsIds of some of the classes that can be parents of this class within an NC tree. Describes relationships required for system operation; cannot be modified. Optional. Can be modified only by the system. See [\[MS-ADTS\]](#) for more information.

```
cn: System-Poss-Superiors
ldapDisplayName: systemPossSuperiors
attributeId: 1.2.840.113556.1.4.195
attributeSyntax: 2.5.5.2
omSyntax: 6
isSingleValued: FALSE
schemaIdGuid: bf967a47-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute isMemberOfPartialAttributeSet is not defined.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.298 Attribute telephoneNumber

This attribute specifies the primary telephone number.

```
cn: Telephone-Number
```

```
ldapDisplayName: telephoneNumber
attributeId: 2.5.4.20
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967a49-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 14856
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.299 Attribute teletexTerminalIdentifier

This attribute specifies the Teletex terminal identifier, and optionally parameters, for a teletex terminal associated with an object.

```
cn: Teletex-Terminal-Identifier
ldapDisplayName: teletexTerminalIdentifier
attributeId: 2.5.4.22
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: bf967a4a-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 33091
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.300 Attribute telexNumber

This attribute specifies a list of alternate telex numbers.

```
cn: Telex-Number
ldapDisplayName: telexNumber
attributeId: 2.5.4.21
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: bf967a4b-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 32
```

```
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 14892
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.301 Attribute `templateRoots`

This attribute specifies an attribute used on the Exchange Server configuration container to indicate where the template containers are stored. This information is used by the Active Directory MAPI provider.

```
cn: Template-Roots
ldapDisplayName: templateRoots
attributeId: 1.2.840.113556.1.4.1346
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: ed9de9a0-7041-11d2-9905-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.302 Attribute `templateRoots2`

This attribute specifies an attribute used on the Exchange Server configuration container to indicate where the template containers are stored. This information is used by the Active Directory MAPI provider. Similar to [templateRoots](#), it differs by being a linked attribute.

```
cn: Template-Roots2
ldapDisplayName: templateRoots2
attributeId: 1.2.840.113556.1.4.2048
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
linkId: 2126
schemaIdGuid: b1cba91a-0682-4362-a659-153e201ef069
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008.

### 2.303 Attribute terminalServer

This attribute specifies opaque data used by Windows NT Terminal Server.

```
cn: Terminal-Server
ldapDisplayName: terminalServer
attributeId: 1.2.840.113556.1.4.885
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 6db69a1c-9422-11d1-aebd-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeUpper: 20480
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute rangeUpper is not defined.

### 2.304 Attribute textEncodedORAddress

This is used to support X.400 [\[X400\]](#) addresses in a text format.

```
cn: Text-Encoded-OR-Address
ldapDisplayName: textEncodedORAddress
attributeId: 0.9.2342.19200300.100.1.2
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: a8df7489-c5ea-11d1-bbcb-0080c76670c0
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 1024
mapiID: 35969
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.305 Attribute thumbnailLogo

This attribute specifies a BLOB containing a logo for this object.

```
cn: Logo
ldapDisplayName: thumbnailLogo
attributeId: 2.16.840.1.113730.3.1.36
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf9679a9-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
```

```
rangeLower: 1
rangeUpper: 32767
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.306 Attribute thumbnailPhoto

This attribute specifies a picture.

```
cn: Picture
ldapDisplayName: thumbnailPhoto
attributeId: 2.16.840.1.113730.3.1.35
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 8d3bca50-1d7e-11d0-a081-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 102400
mapiId: 35998
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.307 Attribute timeRefresh

This attribute specifies the interval during which a resource record that is contained in an Active Directory integrated zone should be refreshed for the DNS server. The default interval is seven days.

```
cn: Time-Refresh
ldapDisplayName: timeRefresh
attributeId: 1.2.840.113556.1.4.503
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: ddac0cf1-af8f-11d0-afeb-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.308 Attribute timeVolChange

This attribute specifies the last time that a file in the remote storage volume was changed.

```
cn: Time-Vol-Change
ldapDisplayName: timeVolChange
attributeId: 1.2.840.113556.1.4.502
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: ddac0cf0-af8f-11d0-afeb-00c04fd930c9
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.309 Attribute title

This attribute specifies the user's job title. This property is commonly used to indicate the formal job title, such as Senior Programmer, rather than occupational class, such as programmer. It is not typically used for suffix titles such as Esq. or DDS.

```
cn: Title
ldapDisplayName: title
attributeId: 2.5.4.12
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967a55-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 128
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 14871
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.310 Attribute tokenGroups

This attribute specifies a computed attribute that contains the list of SIDs due to a transitive group membership expansion operation on a given user or computer. Token groups cannot be retrieved if no global catalog is present to retrieve the transitive reverse memberships.

```
cn: Token-Groups
ldapDisplayName: tokenGroups
attributeId: 1.2.840.113556.1.4.1301
attributeSyntax: 2.5.5.17
omSyntax: 4
isSingleValued: FALSE
```

```
schemaIdGuid: b7c69e6d-2cc7-11d2-854e-00a0c983f608
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: 037088f8-0ae1-11d2-b422-00a0c968f939
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.311 Attribute tokenGroupsGlobalAndUniversal

This attribute specifies the token groups for Exchange Server.

```
cn: Token-Groups-Global-And-Universal
ldapDisplayName: tokenGroupsGlobalAndUniversal
attributeId: 1.2.840.113556.1.4.1418
attributeSyntax: 2.5.5.17
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 46a9b11d-60ae-405a-b7e8-ff8a58d456d2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: 037088f8-0ae1-11d2-b422-00a0c968f939
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.312 Attribute tokenGroupsNoGCAcceptable

This attribute specifies the list of SIDs due to a transitive group membership expansion operation on a given user or computer. Token groups cannot be retrieved if a global catalog is not present to retrieve the transitive reverse memberships.

```
cn: Token-Groups-No-GC-Acceptable
ldapDisplayName: tokenGroupsNoGCAcceptable
attributeId: 1.2.840.113556.1.4.1303
attributeSyntax: 2.5.5.17
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 040fc392-33df-11d2-98b2-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: 037088f8-0ae1-11d2-b422-00a0c968f939
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```



Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.313 Attribute tombstoneLifetime

This attribute specifies the number of days before a deleted object is removed from the directory services. This assists in removing objects from replicated servers and preventing restores from reintroducing a deleted object. This value is in the Directory Service object in the configuration NIC. For more information refer to [\[MS-ADTS\]](#) section 3.1.1.1.15 and [\[MS-DRSR\]](#).

```
cn: Tombstone-Lifetime
ldapDisplayName: tombstoneLifetime
attributeId: 1.2.840.113556.1.2.54
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 16c3a860-1273-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
mapID: 33093
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.314 Attribute transportAddressAttribute

This attribute specifies the name of the address type for the transport.

```
cn: Transport-Address-Attribute
ldapDisplayName: transportAddressAttribute
attributeId: 1.2.840.113556.1.4.895
attributeSyntax: 2.5.5.2
omSyntax: 6
isSingleValued: TRUE
schemaIdGuid: c1dc867c-a261-11d1-b606-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.315 Attribute transportDLLName

This attribute specifies the name of the DLL that will manage a transport.

```

cn: Transport-DLL-Name
ldapDisplayName: transportDLLName
attributeId: 1.2.840.113556.1.4.789
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 26d97372-6070-11d1-a9c6-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 1024
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.316 Attribute transportType

This attribute specifies the distinguished name for a type of transport being used to connect sites together. This value can point to an IP or Simple Mail Transfer Protocol (SMTP) transport.

```

cn: Transport-Type
ldapDisplayName: transportType
attributeId: 1.2.840.113556.1.4.791
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 26d97374-6070-11d1-a9c6-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.317 Attribute treatAsLeaf

This attribute defines a flag for display specifiers (see the [displaySpecifier](#) class in [\[MS-ADSC\]](#)). Display specifiers that have this attribute set to True force the related class to be displayed as a leaf class even if it has children.

```

cn: Treat-As-Leaf
ldapDisplayName: treatAsLeaf
attributeId: 1.2.840.113556.1.4.806
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE

```

```
schemaIdGuid: 8fd044e3-771f-11d1-aeae-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.318 Attribute treeName

This attribute specifies the DNS name of the domain at the root of a tree.

```
cn: Tree-Name
ldapDisplayName: treeName
attributeId: 1.2.840.113556.1.4.660
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 28630ebd-41d5-11d1-a9c1-0000f80367c1
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.319 Attribute trustAttributes

This attribute specifies the trust attributes for a trusted domain. Possible attribute values are as follows: TRUST\_ATTRIBUTE\_NON\_TRANSITIVE Disable transitivity.  
TRUST\_ATTRIBUTE\_TREE\_PARENT Trust is set to the organization tree parent.  
TRUST\_ATTRIBUTE\_TREE\_ROOT Trust set to another tree root in the forest.  
TRUST\_ATTRIBUTE\_UPLEVEL\_ONLY Trusted link valid only for up-level client. For more information, refer to [\[MS-ADTS\]](#) section 7.1.6.7.9.

```
cn: Trust-Attributes
ldapDisplayName: trustAttributes
attributeId: 1.2.840.113556.1.4.470
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 80a67e5a-9f22-11d0-afdd-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute isMemberOfPartialAttributeSet is not defined.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.320 Attribute trustAuthIncoming

This attribute specifies authentication information for the incoming portion of a trust. For more information, refer to [\[MS-ADTS\]](#) section 7.1.6.7.10.

```
cn: Trust-Auth-Incoming
ldapDisplayName: trustAuthIncoming
attributeId: 1.2.840.113556.1.4.129
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf967a59-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.321 Attribute trustAuthOutgoing

This attribute specifies authentication information for the outgoing portion of a trust. For more information refer to [\[MS-ADTS\]](#) section 7.1.6.7.11.

```
cn: Trust-Auth-Outgoing
ldapDisplayName: trustAuthOutgoing
attributeId: 1.2.840.113556.1.4.135
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf967a5f-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.322 Attribute trustDirection

This attribute specifies the direction of a trust. For more information refer to [\[MS-ADTS\]](#) section 7.1.6.7.12.

```
cn: Trust-Direction
ldapDisplayName: trustDirection
attributeId: 1.2.840.113556.1.4.132
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf967a5c-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute `isMemberOfPartialAttributeSet` is not defined.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.323 Attribute trustParent

This attribute specifies the parent in Kerberos trust hierarchy. For more information refer to [\[MS-ADTS\]](#).

```
cn: Trust-Parent
ldapDisplayName: trustParent
attributeId: 1.2.840.113556.1.4.471
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: b000ea7a-a086-11d0-afdd-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.324 Attribute trustPartner

This attribute specifies the name of the domain with which a trust exists. For more information refer to [\[MS-ADTS\]](#) section 7.1.6.7.13.

```
cn: Trust-Partner
ldapDisplayName: trustPartner
attributeId: 1.2.840.113556.1.4.133
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
```

```
schemaIdGuid: bf967a5d-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 1
rangeUpper: 1024
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute `isMemberOfPartialAttributeSet` is not defined.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.325 Attribute `trustPosixOffset`

This attribute specifies the Portable Operating System Interface (POSIX) offset for the trusted domain.

```
cn: Trust-Posix-Offset
ldapDisplayName: trustPosixOffset
attributeId: 1.2.840.113556.1.4.134
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf967a5e-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.326 Attribute `trustType`

This attribute specifies the type of trust, for example, NT or MIT.

```
cn: Trust-Type
ldapDisplayName: trustType
attributeId: 1.2.840.113556.1.4.136
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf967a60-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

```
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute `isMemberOfPartialAttributeSet` is not defined.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.327 Attribute `uASCompat`

This attribute specifies whether the security account manager will enforce data sizes to make Active Directory compatible with the LAN Manager User Account System (UAS). If this value is 0, no limits are enforced. If this value is 1, the following limits are enforced. For more information refer to [\[MS-SAMR\]](#) and [\[MS-NRPC\]](#).

```
cn: UAS-Compat
ldapDisplayName: uASCompat
attributeId: 1.2.840.113556.1.4.155
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf967a61-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: b8119fd0-04f6-4762-ab7a-4986c76b3f9a
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute `attributeSecurityGuid` is not defined.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.328 Attribute `uid`

This attribute specifies a user ID.

```
cn: uid
ldapDisplayName: uid
attributeId: 0.9.2342.19200300.100.1.1
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 0bb0fca0-1e89-429f-901a-1413894d9f59
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE
attributeSecurityGuid: 59ba2f42-79a2-11d0-9020-00c04fc2d3cf
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.329 Attribute uidNumber

This attribute specifies an integer that uniquely identifies a user in an administrative domain, as specified in [RFC2307](#).

```
cn: UidNumber
ldapDisplayName: uidNumber
attributeId: 1.3.6.1.1.1.1.0
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 850fcc8f-9c6b-47e1-b671-7c654be4d5b3
systemOnly: FALSE
searchFlags: fATTINDEX
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2 and Windows Server 2008.

### 2.330 Attribute uNCName

This attribute specifies the universal naming convention name for shared volumes and printers.

```
cn: UNC-Name
ldapDisplayName: uNCName
attributeId: 1.2.840.113556.1.4.137
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967a64-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fATTINDEX
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.331 Attribute unicodePwd

This attribute specifies the password of the user in Windows NT one-way format (OWF). Windows 2000 uses the Windows NT OWF. This property is used only by the operating system. Note that the clear password cannot be derived back from the OWF form of the password. For more information, refer to [\[MS-ADTS\]](#) section 3.1.1.3.1.5.1 and [\[MS-SAMR\]](#) section 3.2.1.8.7.

```
cn: Unicode-Pwd
ldapDisplayName: unicodePwd
attributeId: 1.2.840.113556.1.4.90
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf9679e1-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```



```
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.332 Attribute uniqueIdentifier

This attribute specifies a "unique identifier" for an object represented in the directory. For more information refer to [\[MS-ADTS\]](#).

```
cn: uniqueIdentifier
ldapDisplayName: uniqueIdentifier
attributeId: 0.9.2342.19200300.100.1.44
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: ba0184c7-38c5-4bed-a526-75421470580c
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 256
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.333 Attribute uniqueMember

This attribute specifies the distinguished name for the member of a group. Used by groupOfUniqueNames.

```
cn: uniqueMember
ldapDisplayName: uniqueMember
attributeId: 2.5.4.50
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 8f888726-f80a-44d7-b1ee-cb9df21392c8
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.334 Attribute unixHomeDirectory

This attribute specifies the absolute path to the home directory [\[RFC2307\]](#).

```
cn: UnixHomeDirectory
ldapDisplayName: unixHomeDirectory
```

```
attributeId: 1.3.6.1.1.1.1.3
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: TRUE
schemaIdGuid: bc2dba12-000f-464d-bf1d-0808465d8843
systemOnly: FALSE
searchFlags: 0
rangeUpper: 2048
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2 and Windows Server 2008.

### 2.335 Attribute unixUserPassword

This attribute specifies a userPassword compatible with UNIX systems.

```
cn: UnixUserPassword
ldapDisplayName: unixUserPassword
attributeId: 1.2.840.113556.1.4.1910
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 612cb747-c0e8-4f92-9221-fdd5f15b550d
systemOnly: FALSE
searchFlags: fCONFIDENTIAL
rangeLower: 1
rangeUpper: 128
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2 and Windows Server 2008.

### 2.336 Attribute unstructuredAddress

This attribute specifies the IP address of the router. For example, 100.11.22.33. PKCS #9.

```
cn: unstructuredAddress
ldapDisplayName: unstructuredAddress
attributeId: 1.2.840.113549.1.9.8
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 50950839-cc4c-4491-863a-fcf942d684b7
systemOnly: FALSE
searchFlags: 0
rangeUpper: 256
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.337 Attribute unstructuredName

This attribute specifies the DNS name of the router, for example, router1.microsoft.com. PKCS #9.

```
cn: unstructuredName
```

```
ldapDisplayName: unstructuredName
attributeId: 1.2.840.113549.1.9.2
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: 9c8ef177-41cf-45c9-9673-7716c0c8901b
systemOnly: FALSE
searchFlags: 0
rangeUpper: 256
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.338 Attribute upgradeProductCode

This attribute contains the product code of other packages, such as applications, that can be upgraded by this package, or that can upgrade this package.

```
cn: Upgrade-Product-Code
ldapDisplayName: upgradeProductCode
attributeId: 1.2.840.113556.1.4.813
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: d9e18312-8939-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.339 Attribute uPNSuffixes

This attribute specifies the list of User-Principal-Name suffixes for a domain.

```
cn: UPN-Suffixes
ldapDisplayName: uPNSuffixes
attributeId: 1.2.840.113556.1.4.890
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 032160bf-9824-11d1-aec0-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.340 Attribute url

This attribute specifies a list of alternate Web pages.

```
cn: WWW-Page-Other
ldapDisplayName: url
attributeId: 1.2.840.113556.1.4.749
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 9a9a0221-4a5b-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: e45795b3-9455-11d1-aebd-0000f80367c1
mapiID: 33141
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.341 Attribute userAccountControl

This attribute specifies flags that control the behavior of the user account.

```
cn: User-Account-Control
ldapDisplayName: userAccountControl
attributeId: 1.2.840.113556.1.4.8
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf967a68-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY| fPRESERVEONDELETE | fATTINDEX
attributeSecurityGuid: 4c164200-20c0-11d0-a768-00aa006e0529
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.342 Attribute userCert

This attribute specifies Nortel v1 or DMS certificates.

```
cn: User-Cert
ldapDisplayName: userCert
attributeId: 1.2.840.113556.1.4.645
attributeSyntax: 2.5.5.10
```

```
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf967a69-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 14882
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.343 Attribute userCertificate

This attribute specifies the DER-encoded X509v3 certificates issued to the user ([\[RFC3280\]](#)). Note that this property contains the public key certificates issued to this user by Microsoft Certificate Service.

```
cn: X509-Cert
ldapDisplayName: userCertificate
attributeId: 2.5.4.36
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: bf967a7f-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeUpper: 32768
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 35946
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute rangeUpper is not defined.

### 2.344 Attribute userClass

This attribute specifies a category of computer user.

```
cn: userClass
ldapDisplayName: userClass
attributeId: 0.9.2342.19200300.100.1.8
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 11732a8a-e14d-4cc5-b92f-d93f51c6d8e4
systemOnly: FALSE
searchFlags: 0
```

```
rangeLower: 1
rangeUpper: 256
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.345 Attribute userParameters

This attribute specifies parameters of the user. Points to a Unicode string that is set aside for use by applications. This string can be a null string, or it can have any number of characters before the terminating null character. Microsoft products use this member to store user data specific to the individual program.

```
cn: User-Parameters
ldapDisplayName: userParameters
attributeId: 1.2.840.113556.1.4.138
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967a6d-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
attributeSecurityGuid: 4c164200-20c0-11d0-a768-00aa006e0529
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.346 Attribute userPassword

This attribute specifies the user's password in UTF-8 format. This is a write-only attribute.

```
cn: User-Password
ldapDisplayName: userPassword
attributeId: 2.5.4.35
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: bf967a6e-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 128
mapiID: 33107
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.347 Attribute userPKCS12

This attribute specifies the PKCS #12 PFX Protocol Data Unit (PDU) for exchange of personal identity information.

```
cn: userPKCS12
ldapDisplayName: userPKCS12
attributeId: 2.16.840.1.113730.3.1.216
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 23998ab5-70f8-4007-a4c1-a84a38311f9a
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.348 Attribute userPrincipalName

This attribute specifies the user principal name (UPN) that is an Internet-style logon name for a user, as specified in the Internet standard [\[RFC822\]](#). The UPN is shorter than the distinguished name and easier to remember. By convention, the UPN should map to the user e-mail name. The value set for this attribute is equal to the length of the user's ID and the domain name. For more information about this attribute, see [\[MS-ADTS\]](#).

```
cn: User-Principal-Name
ldapDisplayName: userPrincipalName
attributeId: 1.2.840.113556.1.4.656
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 28630ebb-41d5-11d1-a9c1-0000f80367c1
systemOnly: FALSE
searchFlags: fATTINDEX
rangeUpper: 1024
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute rangeUpper is not defined.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.349 Attribute userSharedFolder

This attribute specifies a UNC path to the user's shared documents folder. The path must be a network UNC path of the form \\server\share\directory. This value can be a null string.

```
cn: User-Shared-Folder
ldapDisplayName: userSharedFolder
attributeId: 1.2.840.113556.1.4.751
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 9a9a021f-4a5b-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.350 Attribute userSharedFolderOther

This attribute specifies a UNC path to the user's additional shared documents folder. The path must be a network UNC path of the form \\server\share\directory. This value can be a null string.

```
cn: User-Shared-Folder-Other
ldapDisplayName: userSharedFolderOther
attributeId: 1.2.840.113556.1.4.752
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 9a9a0220-4a5b-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.351 Attribute userSMIMECertificate

This attribute specifies a certificate distribution object or tagged certificates.

```
cn: User-SMIME-Certificate
ldapDisplayName: userSMIMECertificate
attributeId: 2.16.840.1.113730.3.140
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: e16a9db2-403c-11d1-a9c0-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeUpper: 32768
```



```
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 14960
isMemberOfPartialAttributeSet: TRUE
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute rangeUpper is not defined, and the following attributes are defined differently.

```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

## 2.352 Attribute userWorkstations

This attribute specifies the NetBIOS or DNS names of the computers running Windows NT Workstation/Windows 2000 Professional from which the user can log on. Each NetBIOS name is separated by a comma. The NetBIOS name of a computer is the saMAccountName property of a computer object. Multiple names should be separated by commas.

```
cn: User-Workstations
ldapDisplayName: userWorkstations
attributeId: 1.2.840.113556.1.4.86
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf9679d7-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
rangeLower: 0
rangeUpper: 1024
attributeSecurityGuid: 5f202010-79a5-11d0-9020-00c04fc2d4cf
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute attributeSecurityGuid is not defined.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.353 Attribute uSNChanged

This attribute specifies the Update Sequence Number (USN) value assigned by the local directory for the latest change, including creation. For more information refer to [\[MS-DRSR\]](#).

```
cn: USN-Changed
ldapDisplayName: uSNChanged
attributeId: 1.2.840.113556.1.2.120
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
```

```

schemaIdGuid: bf967a6f-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE | fATTINDEX
mapiID: 32809
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.354 Attribute uSNCreated

This attribute specifies the USN-Changed value assigned at object creation. For more information, refer to [\[MS-DRSR\]](#).

```

cn: USN-Created
ldapDisplayName: uSNCreated
attributeId: 1.2.840.113556.1.2.19
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf967a70-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE | fATTINDEX
mapiID: 33108
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.355 Attribute uSNSALastObjRemoved

This attribute specifies the USN for the last system object that was removed from a server. For more information, refer to [\[MS-DRSR\]](#).

```

cn: USN-DSA-Last-Obj-Removed
ldapDisplayName: uSNSALastObjRemoved
attributeId: 1.2.840.113556.1.2.267
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf967a71-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
mapiID: 33109

```

```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.356 Attribute USNIntersite

This attribute specifies the USN for inter-site replication. For more information refer to [\[MS-DRSR\]](#).

```
cn: USN-Intersite
ldapDisplayName: USNIntersite
attributeId: 1.2.840.113556.1.2.469
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: a8df7498-c5ea-11d1-bbcb-0080c76670c0
systemOnly: FALSE
searchFlags: fATTINDEX
mapID: 33146
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.357 Attribute uSNLastObjRem

This attribute specifies the USN for the last non-system object that was removed from a server. For more information, refer to [\[MS-DRSR\]](#).

```
cn: USN-Last-Obj-Rem
ldapDisplayName: uSNLastObjRem
attributeId: 1.2.840.113556.1.2.121
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf967a73-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
mapID: 33110
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.358 Attribute uSNSource

This attribute specifies the value of the [USN-Changed](#) attribute of the object from the remote directory that replicated the change to the local server. For more information refer to [\[MS-DRSR\]](#).

```
cn: USN-Source
ldapDisplayName: uSNSource
attributeId: 1.2.840.113556.1.4.896
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 167758ad-47f3-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
mapiID: 33111
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.359 Attribute validAccesses

This attribute specifies the type of access that is permitted with an extended right.

```
cn: Valid-Accesses
ldapDisplayName: validAccesses
attributeId: 1.2.840.113556.1.4.1356
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 4d2fa380-7f54-11d2-992a-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.360 Attribute vendor

This attribute specifies the vendor for an application.

```
cn: Vendor
ldapDisplayName: vendor
attributeId: 1.2.840.113556.1.4.255
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 281416df-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
```

```
rangeLower: 0
rangeUpper: 512
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.361 Attribute versionNumber

This attribute specifies a general purpose version number.

```
cn: Version-Number
ldapDisplayName: versionNumber
attributeId: 1.2.840.113556.1.4.141
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf967a76-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.362 Attribute versionNumberHi

This attribute specifies a general purpose major version number.

```
cn: Version-Number-Hi
ldapDisplayName: versionNumberHi
attributeId: 1.2.840.113556.1.4.328
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 7d6c0e9a-7e20-11d0-afd6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.363 Attribute versionNumberLo

This attribute specifies a general purpose minor version number.

```
cn: Version-Number-Lo
ldapDisplayName: versionNumberLo
attributeId: 1.2.840.113556.1.4.329
attributeSyntax: 2.5.5.9
```

```
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 7d6c0e9b-7e20-11d0-afd6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.364 Attribute volTableGUID

This attribute specifies a unique identifier for a Link-Track-Volume table entry.

```
cn: Vol-Table-GUID
ldapDisplayName: volTableGUID
attributeId: 1.2.840.113556.1.4.336
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 1f0075fd-7e40-11d0-afd6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.365 Attribute volTableIdxGUID

This attribute specifies the index identifier for a Link-Track-Volume table entry.

```
cn: Vol-Table-Idx-GUID
ldapDisplayName: volTableIdxGUID
attributeId: 1.2.840.113556.1.4.334
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 1f0075fb-7e40-11d0-afd6-00c04fd930c9
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 0
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.366 Attribute volumeCount

This attribute specifies the tracked volume quota for a given computer.

```

cn: Volume-Count
ldapDisplayName: volumeCount
attributeId: 1.2.840.113556.1.4.507
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 34aaa217-b699-11d0-afee-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.367 Attribute wbemPath

This attribute specifies references to objects in other ADSI namespaces.

```

cn: Wbem-Path
ldapDisplayName: wbemPath
attributeId: 1.2.840.113556.1.4.301
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 244b2970-5abd-11d0-afd2-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT

```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.368 Attribute wellKnownObjects

This attribute specifies a list of well-known object containers by GUID and distinguished name. The well-known objects are system containers. This information is used to retrieve an object after it has been moved by using just the GUID and the domain name. Whenever the object is moved, the system will automatically update the distinguished name portion of the Well-Known-Objects values that referred to the object. The file NTDSAPI.h contains the following definitions that can be used to retrieve an object (the GUIDs that are associated to these objects are contained in NTDSAPI.h):

```

GUID_USERS_CONTAINER_W GUID_COMPUTRS_CONTAINER_W GUID_SYSTEMS_CONTAINER_W
GUID_DOMAIN_CONTROLLERS_CONTAINER_W GUID_INFRASTRUCTURE_CONTAINER_W
GUID_DELETED_OBJECTS_CONTAINER_W GUID_LOSTANDFOUND_CONTAINER_W
GUID_FOREIGNSECURITYPRINCIPALS_CONTAINER_W GUID_PROGRAM_DATA_CONTAINER_W
GUID_MICROSOFT_PROGRAM_DATA_CONTAINER_W GUID_NTDS_QUOTAS_CONTAINER_W

```

```

cn: Well-Known-Objects
ldapDisplayName: wellKnownObjects
attributeId: 1.2.840.113556.1.4.618
attributeSyntax: 2.5.5.7
omSyntax: 127
omObjectClass: 1.2.840.113556.1.1.1.11
isSingleValued: FALSE

```

```
schemaIdGuid: 05308983-7688-11d1-aded-00c04fd8d5cd
systemOnly: TRUE
searchFlags: 0
rangeLower: 16
rangeUpper: 16
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, attribute rangeLower and rangeUpper is not defined.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.369 Attribute whenChanged

This attribute specifies the date when this object was last changed. This value is not replicated and exists in the global catalog. For more information refer to [\[MS-ADTS\]](#).

```
cn: When-Changed
ldapDisplayName: whenChanged
attributeId: 1.2.840.113556.1.2.3
attributeSyntax: 2.5.5.11
omSyntax: 24
isSingleValued: TRUE
schemaIdGuid: bf967a77-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
mapiID: 12296
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
  FLAG_ATTR_REQ_PARTIAL_SET_MEMBER | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

### 2.370 Attribute whenCreated

This attribute specifies the date when this object was created. This value is replicated and is in the global catalog. For more information refer to [\[MS-ADTS\]](#).

```
cn: When-Created
ldapDisplayName: whenCreated
attributeId: 1.2.840.113556.1.2.2
attributeSyntax: 2.5.5.11
omSyntax: 24
isSingleValued: TRUE
schemaIdGuid: bf967a78-0de6-11d0-a285-00aa003049e2
```



```
systemOnly: TRUE
searchFlags: 0
mapiID: 12295
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
    FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

In Windows 2000 Server, the following attributes are defined differently.

```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

The [schemaFlagsEx](#) attribute was added to this attribute definition in Windows Server 2008.

## 2.371 Attribute winsockAddresses

This attribute specifies a Winsock service address.

```
cn: Winsock-Addresses
ldapDisplayName: winsockAddresses
attributeId: 1.2.840.113556.1.4.142
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: bf967a79-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 2.372 Attribute wWWHomePage

This attribute specifies the primary Web page.

```
cn: WWW-Home-Page
ldapDisplayName: wWWHomePage
attributeId: 1.2.840.113556.1.2.464
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967a7a-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 2048
attributeSecurityGuid: e45795b3-9455-11d1-aebd-0000f80367c1
```

```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.373 Attribute x121Address

This attribute specifies the X.121 address for an object, as specified in [\[X121\]](#).

```
cn: X121-Address
ldapDisplayName: x121Address
attributeId: 2.5.4.24
attributeSyntax: 2.5.5.6
omSyntax: 18
isSingleValued: FALSE
schemaIdGuid: bf967a7b-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 15
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 33112
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

### 2.374 Attribute x500uniqueIdentifier

This attribute specifies when a distinguished name has been reused. This is a different attribute type from both the "uid" and "uniqueIdentifier" types.

```
cn: x500uniqueIdentifier
ldapDisplayName: x500uniqueIdentifier
attributeId: 2.5.4.45
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: d07da11f-8a3d-42b6-b0aa-76c962be719a
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, and Windows Server 2008.

## 3 Index

### A

[Active Directory attributes beginning with N - Z](#)  
[Active Directory references](#)  
[Attributes beginning with N - Z](#)

### R

[References - Active Directory](#)

### S

[Schema attributes - Active Directory](#)