
Directory Service Reference Update

[Networking](#) > [Mac OS X Server](#)



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Introduction to Directory Service Reference Update

This document summarizes the symbols that have been added to the Directory Service framework. The full reference documentation notes in what version a symbol was introduced, but sometimes it's useful to see only the new symbols for a given release.

If you are not familiar with this framework you should refer to the complete framework reference documentation.

Organization of This Document

Symbols are grouped by class or protocol for Objective-C and by header file for C. For each symbol there is a link to complete documentation, if available, and a brief description, if available.

See Also

For reference documentation on this framework, see *Directory Service Framework Reference*.

10.5 Symbol Changes

This article lists the symbols added to `DirectoryService.framework` in Mac OS X v10.5.

C Symbols

All of the header files with new symbols are listed alphabetically, with their new symbols described.

DirServices.h

Functions

All of the new functions in this header file are listed alphabetically, with links to documentation and abstracts, if available.

<code>dsGetNextAttributeEntry</code>	
<code>dsGetNextAttributeValue</code>	
<code>dsIsDirServiceLocalRunning</code>	
<code>dsOpenDirServiceLocal</code>	

DirServicesConst.h

Data Types & Constants

All of the new data types and constants in this header file are listed alphabetically, with links to documentation and abstracts, if available.

<code>kDS1AttrAttrListRefCount</code>	
<code>kDS1AttrAttrListValueRefCount</code>	
<code>kDS1AttrBirthday</code>	
<code>kDS1AttrBuildVersion</code>	
<code>kDS1AttrCapacity</code>	

10.5 Symbol Changes

kDS1AttrConfigAvail	
kDS1AttrConfigFile	
kDS1AttrContactGUID	
kDS1AttrCoreFWVersion	
kDS1AttrDirRefCount	
kDS1AttrFunctionalState	
kDS1AttrFWVersion	
kDS1AttrLDAPSearchBaseSuffix	
kDS1AttrMapGUID	
kDS1AttrMetaAutomountMap	
kDS1AttrNetworkNumber	
kDS1AttrNodeRefCount	
kDS1AttrOwnerGUID	
kDS1AttrPIDValue	
kDS1AttrPluginIndex	
kDS1AttrPrimaryComputerGUID	
kDS1AttrPrimaryComputerList	
kDS1AttrProcessName	
kDS1AttrProtocolNumber	
kDS1AttrRecRefCount	
kDS1AttrRefNumTableList	
kDS1AttrRPCNumber	
kDS1AttrTotalRefCount	
kDS1AttrVersion	
kDSNAttrAttributeTypes	
kDSNAttrAttrListRefs	
kDSNAttrAttrListValueRefs	
kDSNAttrAutomountInformation	

10.5 Symbol Changes

kDSNAttrCompany	
kDSNAttrDirRefs	
kDSNAttrEMailContacts	
kDSNAttrGroupServices	
kDSNAttrHomePhoneNumber	
kDSNAttrIPAddressAndENetAddress	
kDSNAttrIPv6Address	
kDSNAttrJPEGPhoto	
kDSNAttrMapCoordinates	
kDSNAttrMapURI	
kDSNAttrNetGroupTriplet	
kDSNAttrNodeRefs	
kDSNAttrOrganizationInfo	
kDSNAttrPhoneContacts	
kDSNAttrPostalAddressContacts	
kDSNAttrRecRefs	
kDSNAttrRelationships	
kDSNAttrResourceInfo	
kDSNAttrResourceType	
kDSNAttrServicesLocator	
kDSStdAuthGetMethodsForUser	
kDSStdAuthKerberosTickets	
kDSStdAuthNTLMv2WithSessionKey	
kDSStdAuthSMB_NT_WithUserSessionKey	
kDSStdMachDebugPortName	
kDSStdMachDSLlookupPortName	
kDSStdMachLocalPortName	
kDSStdRecordTypeAttributeTypes	

kDSStdRecordTypeAugments	
kDSStdRecordTypeAutomount	
kDSStdRecordTypeAutomountMap	
kDSStdRecordTypeComputerGroups	
kDSStdRecordTypePlugins	
kDSStdRecordTypePresetComputerGroups	
kDSStdRecordTypePresetComputers	
kDSStdRecordTypeRecordTypes	
kDSStdRecordTypeRefTableEntries	
kDSStdRecordTypeResources	

DirServicesTypes.h

Data Types & Constants

All of the new data types and constants in this header file are listed alphabetically, with links to documentation and abstracts, if available.

Boolean	
eDSCacheNodeName	
eDSInvalidFilePath	
eDSLocalDSDaemonInUse	
eDSNormalDSDaemonInUse	
eDSRecordTypeDisabled	
FourCharCode	Represents a type used by the Movie Toolkit API.
OptionBits	Represents a type used by the Movie Controller API.
SInt16	
SInt32	
SInt8	
UInt16	

UInt32	
UInt8	Define numeric values in QuickTime programming.

DirServicesUtils.h

Functions

All of the new functions in this header file are listed alphabetically, with links to documentation and abstracts, if available.

dsAppendAuthBuffer	
dsAppendAuthBufferWithAuthorityAttribute	
dsAppendAuthBufferWithAuthorityStrings	
dsFillAuthBuffer	
dsServiceInformationAllocate	

10.4 Symbol Changes

This article lists the symbols added to `DirectoryService.framework` in Mac OS X v10.4.

C Symbols

All of the header files with new symbols are listed alphabetically, with their new symbols described.

DirServices.h

Functions

All of the new functions in this header file are listed alphabetically, with links to documentation and abstracts, if available.

<code>dsDoMultipleAttributeValueSearch</code>	
<code>dsDoMultipleAttributeValueSearchWithData</code>	
<code>dsGetRecordAttributeValueByValue</code>	
<code>dsSetAttributeValues</code>	

DirServicesConst.h

Data Types & Constants

All of the new data types and constants in this header file are listed alphabetically, with links to documentation and abstracts, if available.

<code>kDS1AttrAuthorityRevocationList</code>	
<code>kDS1AttrBootFile</code>	
<code>kDS1AttrCACertificate</code>	
<code>kDS1AttrCategory</code>	
<code>kDS1AttrCertificateRevocationList</code>	

10.4 Symbol Changes

kDS1AttrContactPerson	
kDS1AttrCreationTimestamp	
kDS1AttrCrossCertificatePair	
kDS1AttrDateRecordCreated	
kDS1AttrKerberosRealm	
kDS1AttrModificationTimestamp	
kDS1AttrNeighborhoodType	
kDS1AttrNetworkView	
kDS1AttrNTDomainComputerAccount	
kDS1AttrOwner	
kDS1AttrPrimaryNTDomain	
kDS1AttrSMBPrimaryGroupSID	
kDS1AttrSMBSID	
kDS1AttrTimeToLive	
kDS1AttrUserCertificate	
kDS1AttrUserPKCS12Data	
kDS1AttrUserSMIMECertificate	
kDS1AttrWeblogURI	
kDSNAttrAccessControlEntry	
kDSNAttrComputerAlias	
kDSNAttrGroupMembers	
kDSNAttrMachineServes	
kDSNAttrNeighborhoodAlias	
kDSNAttrNestedGroups	
kDSNAttrNodePathXMLPlist	
kDSNAttrSubNodes	
kDSStdAuthNewUserWithPolicy	
kDSStdAuthNTLMv2	

kDSStdAuthSetLMHash	
kDSStdAuthSetNTHash	
kDSStdAuthSMBNTv2UserSessionKey	
kDSStdRecordTypeAccessControls	
kDSStdRecordTypeAll	
kDSStdRecordTypeCertificateAuthorities	
kDSStdRecordTypeFileMakerServers	
kDSStdRecordTypeNeighborhoods	
kDSValueNSLDynamicNeighborhoodType	
kDSValueNSLLocalNeighborhoodType	
kDSValueNSLStaticNeighborhoodType	
kDSValueNSLTopLevelNeighborhoodType	

DirServicesTypes.h

Data Types & Constants

All of the new data types and constants in this header file are listed alphabetically, with links to documentation and abstracts, if available.

eDSAuthMasterUnreachable	
--------------------------	--

DirServicesUtils.h

Functions

All of the new functions in this header file are listed alphabetically, with links to documentation and abstracts, if available.

dsAllocStringsFromList	
dsCopyDirStatusName	

10.3 Symbol Changes

This article lists the symbols added to `DirectoryService.framework` in Mac OS X v10.3.

C Symbols

All of the header files with new symbols are listed alphabetically, with their new symbols described.

DirServices.h

Functions

All of the new functions in this header file are listed alphabetically, with links to documentation and abstracts, if available.

<code>dsDoDirNodeAuthOnRecordType</code>	
--	--

DirServicesConst.h

Data Types & Constants

All of the new data types and constants in this header file are listed alphabetically, with links to documentation and abstracts, if available.

<code>kDS1AttrAlternateDatastoreLocation</code>	
---	--

<code>kDS1AttrCopyTimestamp</code>	
------------------------------------	--

<code>kDS1AttrDNSDomain</code>	
--------------------------------	--

<code>kDS1AttrDNSNameServer</code>	
------------------------------------	--

<code>kDS1AttrHomeDirectorySoftQuota</code>	
---	--

<code>kDS1AttrKDCConfigData</code>	
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<code>kDS1AttrNote</code>	
---------------------------	--

<code>kDS1AttrOriginalNFSHomeDirectory</code>	
---	--

10.3 Symbol Changes

kDS1AttrOriginalNodeName	
kDS1AttrPasswordPolicyOptions	
kDS1AttrPasswordServerList	
kDS1AttrPrinter1284DeviceID	
kDS1AttrPrinterLPRHost	
kDS1AttrPrinterLPRQueue	
kDS1AttrPrinterMakeAndModel	
kDS1AttrPrinterType	
kDS1AttrPrinterURI	
kDS1AttrRealUserID	
kDS1AttrRelativeDNPrefix	
kDS1AttrSMBAcctFlags	
kDS1AttrSMBGroupRID	
kDS1AttrSMBHome	
kDS1AttrSMBHomeDrive	
kDS1AttrSMBKickoffTime	
kDS1AttrSMBLogoffTime	
kDS1AttrSMBLogonTime	
kDS1AttrSMBProfilePath	
kDS1AttrSMBPWDLastSet	
kDS1AttrSMBRID	
kDS1AttrSMBScriptPath	
kDS1AttrSMBUserWorkstations	
kDS1AttrXMLPList	
kDSNAttrBuilding	
kDSNAttrCountry	
kDSNAttrDepartment	
kDSNAttrFaxNumber	

10.3 Symbol Changes

kDSNAttrIMHandle	
kDSNAttrJobTitle	
kDSNAttrKDCAuthKey	
kDSNAttrKeywords	
kDSNAttrLDAPReadReplicas	
kDSNAttrLDAPWriteReplicas	
kDSNAttrMCXSettings	
kDSNAttrMobileNumber	
kDSNAttrNamePrefix	
kDSNAttrNameSuffix	
kDSNAttrNickName	
kDSNAttrOriginalHomeDirectory	
kDSNAttrPagerNumber	
kDSNAttrPrinterXRISupported	
kDSNAttrStreet	
kDSStdAuthCHAP	
kDSStdAuthGetEffectivePolicy	
kDSStdAuthGetKerberosPrincipal	
kDSStdAuthMPPEMasterKeys	
kDSStdAuthMSCHAP1	
kDSStdAuthReadSecureHash	
kDSStdAuthSecureHash	
kDSStdAuthSetPolicyAsRoot	
kDSStdAuthSetWorkstationPasswd	
kDSStdAuthSMB_NT_UserSessionKey	
kDSStdAuthSMBWorkstationCredentialSessionKey	
kDSStdAuthWithAuthorizationRef	
kDSStdAuthWriteSecureHash	

kDSStdMachPortName	
kDSStdRecordTypeAutoServerSetup	
kDSStdRecordTypeLocations	
kDSStdRecordTypePasswordServer	
kDSStdRecordTypePeople	
kDSStdRecordTypeSharePoints	
kDSTagAuthAuthorityBasic	
kDSTagAuthAuthorityBetterHashOnly	
kDSTagAuthAuthorityDisabledUser	
kDSTagAuthAuthorityKerberosv5	
kDSTagAuthAuthorityLocalCachedUser	
kDSTagAuthAuthorityLocalWindowsHash	
kDSTagAuthAuthorityPasswordServer	
kDSTagAuthAuthorityShadowHash	
kDSValueAuthAuthorityDisabledUser	
kDSValueAuthAuthorityKerberosv5	
kDSValueAuthAuthorityLocalCachedUser	
kDSValueAuthAuthorityShadowHash	
kDSValueNonCryptPasswordMarker	

DirServicesTypes.h

Data Types & Constants

All of the new data types and constants in this header file are listed alphabetically, with links to documentation and abstracts, if available.

eDSAuthInvalidComputer	Attempt to log in from the wrong computer.
eDSAuthInvalidLogonHours	Attempt to log in at an inappropriate time.
eDSAuthPasswordChangeTooSoon	Attempt to change a password occurred too soon.

<code>eDSRefTableCSBPA1locError</code>	Reference table client side buffer parsing (CSBP) error occurred.
<code>eDSRefTableEntryNilError</code>	Reference table error occurred.
<code>eDSRefTableFWA1locError</code>	Reference table allocation error occurred.
<code>eDSRefTableIndexOutOfBoundsError</code>	
<code>eDSRefTableNilError</code>	Reference table error occurred.

DirServicesUtils.h

Functions

All of the new functions in this header file are listed alphabetically, with links to documentation and abstracts, if available.

<code>dsParseAuthAuthority</code>	
-----------------------------------	--

10.2 Symbol Changes

This article lists the symbols added to `DirectoryService.framework` in Mac OS X v10.2.

C Symbols

All of the header files with new symbols are listed alphabetically, with their new symbols described.

DirServices.h

Functions

All of the new functions in this header file are listed alphabetically, with links to documentation and abstracts, if available.

<code>dsOpenDirServiceProxy</code>	
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Data Types & Constants

All of the new data types and constants in this header file are listed alphabetically, with links to documentation and abstracts, if available.

<code>DSPROXY</code>	
----------------------	--

DirServicesConst.h

Data Types & Constants

All of the new data types and constants in this header file are listed alphabetically, with links to documentation and abstracts, if available.

<code>kDS1AttrAdminLimits</code>	
----------------------------------	--

<code>kDS1AttrENetAddress</code>	
----------------------------------	--

<code>kDS1AttrFirstName</code>	
--------------------------------	--

<code>kDS1AttrHomeDirectoryQuota</code>	
---	--

10.2 Symbol Changes

kDS1AttrHomeLocOwner	
kDS1AttrLastName	
kDS1AttrLocation	
kDS1AttrMCXFlags	
kDS1AttrMCXSettings	
kDS1AttrMiddleName	
kDS1AttrPasswordServerLocation	
kDS1AttrPicture	
kDS1AttrPort	
kDS1AttrPresetUserIsAdmin	
kDS1AttrPrintServiceUserData	
kDS1AttrServiceType	
kDS1AttrSetupAdvertising	
kDS1AttrSetupAutoRegister	
kDS1AttrSetupLocation	
kDS1AttrSetupOccupation	
kDS1StandardAttrHomeLocOwner	
kDSNAttrAddressLine1	
kDSNAttrAddressLine2	
kDSNAttrAddressLine3	
kDSNAttrAreaCode	
kDSNAttrAuthenticationAuthority	
kDSNAttrBootParams	
kDSNAttrCity	
kDSNAttrComputers	
kDSNAttrNetGroups	
kDSNAttrOrganizationName	
kDSNAttrPostalCode	

10.2 Symbol Changes

kDSNAttrState	
kDSStdAuth2WayRandomChangePasswd	
kDSStdAuthCRAM_MD5	
kDSStdAuthDeleteUser	
kDSStdAuthDIGEST_MD5	
kDSStdAuthGetGlobalPolicy	
kDSStdAuthGetPolicy	
kDSStdAuthGetUserData	
kDSStdAuthGetUserName	
kDSStdAuthMASKE_A	
kDSStdAuthMASKE_B	
kDSStdAuthMSCHAP2	
kDSStdAuthNewUser	
kDSStdAuthSetGlobalPolicy	
kDSStdAuthSetPolicy	
kDSStdAuthSetUserData	
kDSStdAuthSetUserName	
kDSStdRecordTypeBootp	
kDSStdRecordTypeComputerLists	
kDSStdRecordTypeComputers	
kDSStdRecordTypeEthernets	
kDSStdRecordTypeHostServices	
kDSStdRecordTypeNetDomains	
kDSStdRecordTypeNetGroups	
kDSStdRecordTypePresetComputerLists	
kDSStdRecordTypePresetGroups	
kDSStdRecordTypePresetUsers	
kDSStdRecordTypePrintServiceUser	

kDSValueAuthAuthorityBasic	
kDSValueAuthAuthorityDefault	
kDSValueAuthAuthorityLocalWindowsHash	
kDSValueAuthAuthorityPasswordServerPrefix	

DirServicesTypes.h

Data Types & Constants

All of the new data types and constants in this header file are listed alphabetically, with links to documentation and abstracts, if available.

eDSAttributeValueNotFound	
eDSAuthAccountDisabled	
eDSAuthAccountExpired	
eDSAuthAccountInactive	
eDSAuthNewPasswordRequired	
eDSAuthPasswordExpired	
eDSAuthPasswordNeedsDigit	
eDSAuthPasswordNeedsLetter	
eDSAuthPasswordQualityCheckFailed	
eDSAuthPasswordTooLong	
eDSAuthPasswordTooShort	
eDSCompoundExpression	Accommodates an attribute search based on a pre-built compound expression.
eDSDefaultNetworkNodes	Matches the default network node.
eDSiCompoundExpression	Accommodates an attribute search based on a pre-built compound expression (case insensitive).
eDSIPUnreachable	No response from the server at the specified IP address.
eDSNetworkSearchNodeName	Searches across all the nodes returned by eDSDefaultNetworkNodes.
eDSRefTableError	Reference table error occurred.

10.2 Symbol Changes

eDSSchemaError	
eDSTCPReceiveError	Error occurred when receiving data from a remote server.
eDSTCPSendError	Error occurred when sending data to a remote server.
eDSTCPVersionMismatch	Mismatch of TCP versions occurred.
eDSUnknownHost	Specified server could not be found.
eDSVersionMismatch	

10.1 Symbol Changes

This article lists the symbols added to `DirectoryService.framework` in Mac OS X v10.1.

C Symbols

All of the header files with new symbols are listed alphabetically, with their new symbols described.

DirServicesConst.h

Data Types & Constants

All of the new data types and constants in this header file are listed alphabetically, with links to documentation and abstracts, if available.

kDS1AttrChange	
kDS1AttrExpire	
kDS1AttrNFSHomeDirectory	
kDS1AttrPasswordPlus	
kDS1AttrVFSDumpFreq	
kDS1AttrVFSLinkDir	
kDS1AttrVFSPassNo	
kDS1AttrVFSType	
kDSNAttrVFSOpts	

Document Revision History

This table describes the changes to *Directory Service Reference Update*.

Date	Notes
2007-05-02	New document that summarizes the symbols introduced in the Directory Service framework.

