AD research

The .NET Developer's Guide to Directory Services Programming

<https://books.google.is/books?id=kGApqjobEfsC&pg=PA50&lpg=PA50&dq=C%23+.net+4+activeds.dll&source=bl&ots=p6qoScVOTd&sig=XVBw0BoZh-dvS3amUAYX_rPtjUA&hl=is&sa=X&ved=0CDYQ6AEwA2oVChMIiNma6-LTxwIVB9gsCh2ChwQC#v=onepage&q=C%23%20.net%204%20activeds.dll&f=false>

AD Attributes

<http://www.rlmueller.net/UserAttributes.htm> (Excel docs)

3.1.1.4.5.33 msDS-UserPasswordExpiryTimeComputed

<https://msdn.microsoft.com/en-us/library/cc223410.aspx>

userAccountControl flags

<http://www.selfadsi.org/ads-attributes/user-userAccountControl.htm#UF_PASSWORD_EXPIRED>

<https://support.microsoft.com/en-us/kb/305144>

<http://www.informit.com/articles/article.aspx?p=474649&seqNum=3>

<https://msdn.microsoft.com/en-us/library/cc245673.aspx>

<https://msdn.microsoft.com/en-us/library/ms677840(v=vs.85).aspx>

<https://msdn.microsoft.com/en-us/library/cc223145.aspx>

<https://msdn.microsoft.com/en-us/library/cc223393.aspx>

<https://technet.microsoft.com/en-us/library/ee198831.aspx>

Security Descriptor Definition Language (SDDL)

<https://msdn.microsoft.com/en-us/library/windows/desktop/aa379567(v=vs.85).aspx>

<https://msdn.microsoft.com/en-us/library/windows/desktop/aa379570(v=vs.85).aspx>

<https://msdn.microsoft.com/en-us/library/windows/desktop/aa374928(v=vs.85).aspx>

<https://msdn.microsoft.com/en-us/library/windows/desktop/aa379637(v=vs.85).aspx>

<http://www.netid.washington.edu/documentation/domains/sddl.aspx>

<http://blogs.technet.com/b/askds/archive/2008/04/18/the-security-descriptor-definition-language-of-love-part-1.aspx>

<http://stackoverflow.com/questions/7724110/convert-sddl-to-readable-text-in-net>

3.1.1.5 Password Settings Attributes for Originating Update Constraints

<https://msdn.microsoft.com/en-us/library/cc245830.aspx>

FILETIME attributes:

Note – all AD times are UTC time – must calculate local time.

|  |  |
| --- | --- |
| pwdLastSet | = 0 when **User must change password at next logon (if UF\_DONT\_EXPIRE\_PASSWD = 0**.  = -1 (0XFFFFFFFFFFFFFFFF) when **User must change password at next logon** not required.  <https://msdn.microsoft.com/en-us/library/ms679430(v=vs.85).aspx>  <https://msdn.microsoft.com/en-us/library/aa746510(v=vs.85).aspx>  <http://www.selfadsi.org/ads-attributes/user-pwdLastSet.htm> |
| badpasswordtime | = 0 when last time a incorrect password was used is unknown.  <https://msdn.microsoft.com/en-us/library/ms675243(v=vs.85).aspx> |
| lastlogon | = 0 when last logon time is unknown.  <https://msdn.microsoft.com/en-us/library/ms676823(v=vs.85).aspx> |
| msDS-UserPasswordExpiryTimeComputed | = 0 when pwdLastSet is 0.  = 0x7FFFFFFFFFFFFFFF when password never expires,.  <https://msdn.microsoft.com/en-us/library/cc223410.aspx> |
| lockouttime | = 0 when the account is not currently locked out.  <https://msdn.microsoft.com/en-us/library/ms676843(v=vs.85).aspx> |
| accountexpires | = 0 or 0x7FFFFFFFFFFFFFFF indicates that the account never expires.  <https://msdn.microsoft.com/en-us/library/ms675098(v=vs.85).aspx> |

8000000000000000

7FFFFFFFFFFFFFFF