

How can I find out the last time a user logged on from C++?

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The PowerShell `Get-LocalUser` cmdlet gives you information about a local user, including the last logon time.

```
PS> Get-LocalUser Fred | Format-List
```

```
AccountExpires      :  
Description         :  
Enabled             : True  
FullName            :  
PasswordChangeableDate : 04/02/2023 2:25:04 PM  
PasswordExpires     :  
UserMayChangePassword : True  
PasswordRequired    : False  
PasswordLastSet     : 04/01/2023 2:25:04 PM  
LastLogon           : 04/01/2023 2:28:41 PM  
Name                 : Fred  
SID                  : S-1-5-21-162119347-98882960-612995125-1001  
PrincipalSource      : Local  
ObjectClass         : User
```

How can you get this information from C++?

For historical reasons, commands for operating with local users are in the LAN Manager API family. That's because MS-DOS was a single-user operating system, so the only time you had to worry about "users" was if you were operating over the network.

This is also why a bunch of user management operations are handled by `NET.EXE`. The `NET.EXE` program was the part of LAN Manager that gave you access to all the network magic stuff.

```
C:\> NET USER Fred
```

```
User name                Fred
Full Name
Comment
User's comment
Country/region code      000 (System Default)
Account active            Yes
Account expires           Never

Password last set        04/01/2023 2:25:04 PM
Password expires         Never
Password changeable      04/02/2023 2:25:04 PM
Password required        No
User may change password Yes

Workstations allowed     All
Logon script
User profile
Home directory
Last logon               04/01/2023 2:28:41 PM

Logon hours allowed      All

Local Group Memberships  *Administrators
Global Group memberships *None
The command completed successfully.
```

The native function for getting this information is `NetUserGetInfo`. In particular, asking for information level 2 gives you a `USER_INFO_2` structure which contains, among other things, `usri2_last_logon`.

The documentation includes a sample program showing how to request various levels of information and then print the results, so I won't bother repeating it here.