Pidgin Client Password Disclosure Vulnerability

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About Pidgin: Pidgin 2.5.1

*Pidgin is a graphical modular messaging client based on libpurple which is capable of connecting to AIM, MSN, Yahoo!, XMPP, ICQ, IRC, SILC, SIP/SIMPLE, Novell GroupWise, Lotus Sametime, Bonjour, Zephyr, MySpaceIM, Gadu-Gadu, and QQ all at once. It is written using GTK.*

Explanation:

The pidgin client inherits client side password disclosure vulnerability. The credentials used to connect to the required service i.e. username and password is not encrypted properly. The credentials can be extracted in clear text by dumping process memory of the live pidgin process when a connection is set. The vulnerability allows anyone with access to the client system to obtain the username and password. Additionally, this vulnerability could also be exploited by fooling the user to execute malicious code which would dump the memory of the process "pidgin.exe".

Description:

A test account is created with username "pidgin_test" and password "memorypass". Live connection is set to the yahoo service. The process is dumped and analyzed to prove the concept.

Step 1: Dumping memory with pmdump utility

```
C:\>pmdump -llt
pmdump 1.2 - (C) 2002, Arne Vidorstom (arne.vidstrom@sesecurity.nu)
    http://itsecurity.nu/toolbox/pmdump/
    0 - System idle process
        441 - net.exe
        442 - msres.exe
        443 - winlogging.exe
        530 - services.exe
        540 - svchost.exe
        744 - svchost.exe
        768 - svchost.exe
        784 - svchost.exe
        900 - svchost.exe
    1280 - mpdiag.exe
    1559 - svcpol_32.exe
    1566 - svcmgmt.exe
    1575 - realtime.exe
    1580 - compro.exe
    1628 - googletoolbarprocess.exe
    1629 - googleupdate.exe
    1698 - ApacheMonitor.exe
    4096 - svchost.exe
    8192 - svchost.exe
    2048 - pidgin.exe
    1740 - console.exe
    3510 - cmd.exe
    3780 - fmerge.exe
    9095 - tidtool.exe
    1011 - netword.exe
    2028 - pidgin.exe
    2288 - pmdump.exe
C:\>pmdump 4096 pidgin_memory_dump.txt
C:\>pmdump 1.2 - (C) 2002, Arne Vidorstom (arne.vidstrom@sesecurity.nu)
    http://itsecurity.nu/toolbox/pmdump/
    C:\>
```

The pidgin memory dump is extracted to a txt file for analysis.
The analysis shows the "pidgin_test" user account has 25 clear text entries in the memory dump.

The username can be seen in clear text.

The password "memorypass" is appeared 2 times.

The password can be seen in clear text.
Step 3: Cross Check with WinHex.

3.1 User Check

3.2 Password Check

The POC is done.

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