
Subject: Little problem in util.cpp and simple solution
Posted by [koldo](#) on Sun, 15 Apr 2012 20:16:29 GMT
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Hello Mirek

In util.cpp there is this:

```
#ifdef PLATFORM_POSIX
dword GetTickCount() {
    struct timeval tv[1];
    struct timezone tz[1];
    memset(tz, 0, sizeof(tz));
    gettimeofday(tv, tz);
    return (dword)tv->tv_sec * 1000 + tv->tv_usec / 1000;
}

int msecs(int from) { return int((GetTickCount() - (dword)from) & 0x7fffffff); }

#endif
```

This produces linking problems in MinGW.

Just moving msecs() outside the #ifdef solves the problem:

```
#ifdef PLATFORM_POSIX
dword GetTickCount() {
    struct timeval tv[1];
    struct timezone tz[1];
    memset(tz, 0, sizeof(tz));
    gettimeofday(tv, tz);
    return (dword)tv->tv_sec * 1000 + tv->tv_usec / 1000;
}

#endif

int msecs(int from) { return int((GetTickCount() - (dword)from) & 0x7fffffff); }
```

Subject: Re: Little problem in util.cpp and simple solution
Posted by [mirek](#) on Mon, 16 Apr 2012 19:55:39 GMT
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Yes. Hopefully, it is the last one because if inet refactoring, as it is almost finished...

Subject: Re: Little problem in util.cpp and simple solution
Posted by [Zbych](#) on Tue, 17 Apr 2012 07:45:23 GMT
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Removing sign bit like this:

```
int msecs(int from) { return int((GetTickCount() - (dword)from) & 0x7fffffff); }  
~~~~~
```

is not a good idea. There are some places in up that rely on sign bit (e.g. htcli):

```
if(msecs(end_time) >= 0) {  
~~~~~  
    error = NFormat("Timeout reading footer block (%d B).", body.GetLength());  
    break;  
}
```

While in other places msecs is used incorrectly (httpcli again):

```
while(msecs() < end_time) {
```

Someone forgot that ticks wrap every ~50 days (or ~25 days if sign bit is masked).

Subject: Re: Little problem in util.cpp and simple solution

Posted by [Zbych](#) on Tue, 17 Apr 2012 07:52:56 GMT

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Maybe it's time to migrate to 64-bit ticks?

Subject: Re: Little problem in util.cpp and simple solution

Posted by [mirek](#) on Tue, 17 Apr 2012 08:03:21 GMT

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Zbych wrote on Tue, 17 April 2012 03:45Removing sign bit like this:

```
int msecs(int from) { return int((GetTickCount() - (dword)from) & 0x7fffffff); }  
~~~~~
```

is not a good idea. There are some places in up that rely on sign bit (e.g. htcli):

```
if(msecs(end_time) >= 0) {  
    ^^^^^^^^^^^^^^^^^^  
    error = NFormat("Timeout reading footer block (%d B).", body.GetLength());  
    break;  
}
```

While in other places msecs is used incorrectly (httpcli again):

```
while(msecs() < end_time) {
```

Someone forgot that ticks wrap every ~50 days (or ~25 days if sign bit is masked).

Thanks, correct, reverted and hopefully places where wrap applies fixed (please check).

Mirek
