
Subject: ReadSecret() function for reading passwords, etc. from the console.

Posted by [Oblivion](#) on Thu, 13 Jul 2017 21:06:02 GMT

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Hello,

One thing I found in the U++ core lacking on the console-based apps side is a ReadStdIn() function with the ability to suppress echoes of the inputs from the stdin.

Please find attached the patched Stream.{h,cpp,hpp} files.

These files now contain three related funtions: ReadSecret(), EnableEcho(), and DisableEcho().

ReadSecret():

```
String ReadSecret()
{
    DisableEcho();
    String s = ReadStdIn();
    EnableEcho();
    return s;
}
```

EnableEcho():

```
void EnableEcho(bool b)
{
#ifdef PLATFORM_POSIX
    termios t;
    tcgetattr(STDIN_FILENO, &t);
    if(b) t.c_lflag |= ECHO;
    else t.c_lflag &= ~ECHO;
    tcsetattr(STDIN_FILENO, TCSANOW, &t);
#elif PLATFORM_WIN32
    HANDLE h = GetStdHandle(STD_INPUT_HANDLE);
    DWORD mode = 0;
    GetConsoleMode(h, &mode);
    if(b) mode |= ENABLE_ECHO_INPUT;
    else mode &= ~ENABLE_ECHO_INPUT;
    SetConsoleMode(h, mode);
#endif
}
```

DisableEcho():

```
void DisableEcho()
{
    EnableEcho(false);
}
```

```
}
```

I also added a topic++ entry for the ReadSecret() function in the api doc file.

Tested this code on Win7-10, and Linux.

Please consider adding this -or a better version of this function- to stream utilities, since reading passwords and secret phrases from console is not uncommon.

Best regards.
Oblivion.

File Attachments

1) [Modified_StreamUtilites.zip](#), downloaded 336 times

Subject: Re: ReadSecret() function for reading passwords, etc. from the console.
Posted by [mirek](#) on Sat, 15 Jul 2017 09:06:28 GMT
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This is a good addition, thank you!

Mirek

Subject: Re: ReadSecret() function for reading passwords, etc. from the console.
Posted by [Oblivion](#) on Mon, 08 Jan 2018 13:07:51 GMT
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Hello Mirek,

Improved version:

It seems that TCSADRAIN is recommended over TCSANOW, when reading secret input.
Also, I added the line: "Cout().PutEol()" to ReadSecret() function, as it should move to a new line, after it has read input.

```
String ReadSecret()
{
    DisableEcho();
    String s = ReadStdIn();
    EnableEcho();
    Cout().PutEol();
    return s;
}
```

```
}

void EnableEcho(bool b)
{
#ifdef PLATFORM_POSIX
    termios t;
    tcgetattr(STDIN_FILENO, &t);
    if(b) t.c_lflag |= ECHO;
    else t.c_lflag &= ~ECHO;
    tcsetattr(STDIN_FILENO, TCSADRAIN, &t);
#elif PLATFORM_WIN32
    HANDLE h = GetStdHandle(STD_INPUT_HANDLE);
    DWORD mode = 0;
    GetConsoleMode(h, &mode);
    if(b) mode |= ENABLE_ECHO_INPUT;
    else mode &= ~ENABLE_ECHO_INPUT;
    SetConsoleMode(h, mode);
#endif
}
```

Best regards,
Oblviion

Subject: Re: ReadSecret() function for reading passwords, etc. from the console.
Posted by [mirek](#) on Mon, 08 Jan 2018 13:24:11 GMT
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OK. Applied.
