Subject: Re: A terminal emulator widget for U++
Posted by Oblivion on Sat, 27 Feb 2021 21:07:28 GMT
View Forum Message <> Reply to Message

Hello,

tldlr:

In the following weeks TerminalCtrl will finally gain winpty support.
 This means that it will be able to run as a local terminal ("natively") on Windows XP/Vista/7/8/10, without requiring Cygwin, Msys2 or Win10 pseudoconsole api. :)

This idea was brewing for some time as I was investigating the possibility of embedding native windows console support in PtyProcess class.

As it turned out, it was suprisingly trivial, thanks to winpty.

Pros:

1. TerminalCtrl does not require any specific hack or intervention to run on Windows as a local (=not remote) console, thanks to its design and WinPty.

2. Cygwin or MSYS2 are not required. Only the libwinpty (winpty.lib or winpty.dll) and winpty-agent is required and they compile on native CLANG compiler and Windows environment.

3. WinPty's API seamlessly integrates with PtyProcess class and it api. As a result, the existing terminal examples or code using PtyProcess class do not require any modification. A simple compiler flag (flagWINPTY) will be enough to switch it on.

4. This means it is possible run cmd.exe, bash.exe, powershell.exe, or any Windows-native console application (such as FAR file manager - see screenshot below) directly on TerminalCtrl/PtyProcess.

5. This also means that TerminalCtrl can be set to run in CygWin and Msys2 environments, and it can easily replace Mintty, which is, AFAIK, bound to Cygwin or Msys2 subsystem.

6. winpty has MIT license. You can freely supply the winpty.lib and winpty-agent with your application.

Cons:

- Nothing much at the moment, really. Winpty has some small quirks but they arent specific to our terminal emulator widget.

Below screenshot is from the Far file manager. It is running natively on the stock TerminalExample, on Windows 7.

If you have any questions, bug reports, suggestions criticism, etc. let me know.

Best regards,
Oblivion

File Attachments

1) , downloaded 956 times