Subject: Re: A terminal emulator widget for U++
Posted by Oblivion on Fri, 10 Apr 2020 00:17:43 GMT
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Hello,

The day has come. Terminal package is upgraded to v0.3.

This is a huge release, with lots of changes, fixes, additions and improvements.

I am not going to list every change but some highlights here. If you want to see the full list, please check out the git history.

- Source code is restructured.
- Console class is ditched for the sake of simplicity. There is now only Terminal, deriving from Upp:CTrl.
- Eastern-Asian/CJK double width characters support is added.
- Text overline attribute is now supported.
- APCs (application programming commands) are now supported. This is the first step towards terminal scripting feature. APCs can be also be used by client code for private purposes.
- TRUECOLOR flag is removed. Terminal ctrl is now fully and officially a true color terminal emulator.
- Accordingly, CMY and CMYK color spaces are now supported too!
- Support for color text specifications (rgb, hash3, hash6, hash9, hash12) are added.
- xterm window actions are reports are implemented. It is now possible for host apps to move, resize, minimize, maximize, fullscreen the terminal.
- Renderer has seen a significat performance boost (up to 80% on some torture tests).
- tmux/screen is fully supported.
- Hyperlinks now show nice dots under their texts when they are "inactive" (i.e. no mouse hovering over them)
- API docs and specifications docs are significantly improved.

But how compliant is it?

Using George Nachmann's (iTerm2's developer) excellent and comprehensive test suite (it is analogous to the browser standard compliance tests), esctest, the results are as follows:

expected-terminal=xterm
max-vt-level=4

Terminal ctrl: v0.3, passed 407 tests, failed on 101 tests,

Terminal ctrl: v0.2 passed only 160 of the same tests.

Let us now look at the latest stable version of Gnome terminal and Kitty, with same settings:

expected-terminal=xterm
max-vt-level=4

Gnome Terminal (v.3.36.1.1): passed 163 tests and failed on 345 tests.

Kitty: passed 122 tests, and failed on 386 tests.

xterm: Fassed all tests. (not suprisingly)

Keep in mind that I am not even implying that Terminal ctrl is better. (It isn't. Gnome Terminal is a very high quality product with excellent features).

I am simply pointing out where our VT engine stands on the xterm compliance front (since xterm is the defacto standard), and the progress made with the nev version.

Hyperlinks with dots:

You can find the new version on my git repo.

If you have any questions, suggestions, bug reports, patches, feature requests, etc. please feel free to contact me via my github address or this forum topic.

Enjoy!

Best regards,
Oblivion

File Attachments

1) hyperlink_dots.png, downloaded 2022 times

```
52 Haz  8  2018 earth.gif
04 Mar 25  2019 firework
50 Kas 12 22:41 jexer.jar
78 Şub 23  2017 matchstick.gif
15 Ağu  8  2019 scientia.png
48 Tem 22  2018 snake.jpg
96 Şub 22 13:03 SSHTesting
30 Mar 10  2019 tabtest
44 Mar 25  2019 tclock
38 Ağu  7  2019 terminal-screenshot.jpg
44 Mar 25  2019 testcurs
 2 Mar 25 22:51 tt.txt
```