Dzen Is Awesome!



Dzen

Dzen is a general purpose messaging, notification and menuing program for X11. It was designed to be scriptable in any language and integrate well with window managers like dwm, wmii and xmonad though it will work with any windowmanger.

What will be covered in this presentation?

- Ways you can use Dzen to enhance your desktop experience
- Configuring Dzen as a status bar
- Configuring Dzen as an app launcher
- Adding simple UI enhancements

Why you might want to use Dzen.

- You don't like the panel provided by your DE
- You want a panel with killer feature xxx, but aren't willing to learn C/C++ and a GUI toolkit like Qt or GTK.
- You like a minimalist desktop experience built the Unix way.

What you need to install:

- Dzen2
- Xrdb
- UI assets (fonts, icons etc)

What you need to know

- How to edit ~/.Xresources config files
- A scripting language of your choice.

Dzen Basics

Pipe something into dzen and specify the dzen window size, placement and duration options (-w=width -h=height -x=x axis -y=y axis)

```
(echo "Hello World"; sleep 4) | dzen2 -x 50 -y 150 -w 500 -h 500
```

See hello_world.sh

Style it!

There are option flags to enhance typography

```
-bg=background-color -fg=foreground color -ta=text align -fn=font

(echo "Hello World"; sleep 4) | dzen2 -x 50 -y 150 -w 500 -h
```

500 -bg '#cc0000' -fg '#ffffff' -fn 'Roboto:bold:size=22'

```
See hello world styled.sh
```

Inline Fonts & Colors

Fonts:

```
^fn(fontname:weight:size)
```

Colors:

```
^fg(foreground color)
```

^bg(background color)

Loop: Clock example

Next we create a clock that updates every second.

For this we create a loop, that a contains the command and the interval that updates occur.

```
(while true; do echo "^fn(Digital Numbers:size=44)$(date
'+%l:%M:%S')"; sleep 1;done) | dzen2 -x 50 -y 150 -w 500 -h
150 -bg '#000000' -fg '#ffffff'
```

See clock.sh

Slave Windows

Slave windows are like dropdown windows. You can specify -I for the amount of lines to be drawn. -w becomes slave window width and -tw sets the title window width. Add a second command to provide content for the slave window.

(echo "Files"; Is -lah ~/Documents; sleep 20) | dzen2 -fn 'Roboto:Medium:15px' -x 550 -y 250 -tw 175 -w 775 -l 8

See slave window.sh

Menu Mode

Adding -m option to put the slave window into menu mode. Menu mode adds dropdown menu hover effects.

(echo "Files"; echo "inkscape";echo "firefox"; echo "chrome"; sleep 20) | dzen2 -fn 'Roboto:Medium:15px' -x 550 -y 250 -tw 175 -w 775 -l 3 -m

See menu mode.sh

Application Menu Example

Slave window is enhanced with hover states.

The text of each line is executed as a command when clicked.

See app_menu.sh

Events & Actions

```
Dzen Syntax:
-e 'event1=action1:option1:...option<n>,...,action<m>;...;event<l>'
Example:
-e 'enterslave=grabkeys;leaveslave=ungrabkeys;
       button4=scrollup;button5=scrolldown;
       key_Left=scrollup;key_Right=scrolldown;
       button1=menuexec;button3=exit:13
       key Escape=ungrabkeys,exit'
```

^{*} If you define any events/actions, there is no default behaviour, i.e. you will have to specify all events/actions you want to use

Inline Click Action

You can also assign an inline click action to some text.

Example:

(echo "\(^ca(1,\)firefox\)Firefox \(^ca()\)"; sleep 10) | dzen2 -x 50 -y 150 -w 100 -h 50 -fn 'Roboto:Medium:12'

See click action.sh

~/.Xresources

Set Dzen's default options in your ~/.Xresources file. You will need to install xrdb to make your changes effective.

Suggested Fonts with Icons

- Font-awesome
- Nerd Fonts
- Google Web Fonts

Fonts as icons

It's easy to add icons. Just specify the font and add unicode value with text editor (consult your editor's docs). With font icons you can also easily change colors with inline ^fg().

In vim you can ... [Ctrl + v], [u], [unicode value]

^fn(DroidSansMonoForPowerline Nerd Font:size=33)<e745>

See firefox_icon.sh

Putting it all together

- Battery Level (battery.sh)
- Active Sessions (sessions.sh)
- Jails (jails.sh)
- Current Workspace (workspace.sh)
- Full Top Panel (top panel.sh)

Resources

- https://www.materialpalette.com/
- http://terminal.sexy/
- https://color.adobe.com/explore/?filter=newest
- https://www.reddit.com/r/unixporn/
- https://github.com/robm/dzen
- https://github.com/ryanoasis/nerd-fonts#font-patcher

DotFiles Repo: https://github.com/dszidi/knoxbug-dzen