XYZCommander

http://xyzcmd.syhpoon.name/

Created 04.05.2010

Main features:

* Tight integration with python run–time system — most of the settings can be changed "on the fly" via management console.

* Powerful configuration system - define own actions, aliases, internal commands, key bindings.

* Extensible plug-in system - even core functionality implemented mainly using plug–ins, keeping base system small and clean.

* Events & hooks subsystem - a flexible way of reacting on certain system events.

* Customizable look-n-feel - every widget component look can be changed using skins.

* Unicode support

Tabs

(0 /) (1 UNIX) (2 usr)

(0 dev)

─────── /dev ───────

Active panel

Left panel	Right panel
/..	/..
/bin	/.initramfs
/boot	/.udev
~cdrom	/block
/dev	/bsg
/etc	/bus
/home	/char
/lib	/disk
/media	~fd
/mnt	/input
/opt	/mapper
/proc	/net
/root	/pts
/sbin	/shm
/selinux	/snd
/srv	/syhpoon
/sys	/v4l
/tmp	.initramfs-tools
/usr	@MAKEDEV
/var	-adsp
@initrd.img	-audio
@initrd.img.old	-autofs
@vmlinuz	@cdrom1
@vmlinuz.old	@cdrw1
	-console
	@core
	-cpu_dma_latency
	-dsp
	@dvd1

Inactive panel

/   4K drwxr-xr-x

/   4K drwxr-xr-x

Prompt

Command line

Skins

Skin is the way to customize look'n'feel of XYZCommander.

Customizable elements are:
    * Elements of filesystem based on fsrule description:
    * All user interface widgets

XYZCommander comes with 5 standard skins:

Seablue (default)

```
{0 /} {1 UNIX} {2 usr}                          {0 dev}
┌─────────────── / ───────────────┐  ┌──────────────── /dev ────────────────┐
/..                                  /..
/bin                                 /.initramfs
/boot                                /.udev
~cdrom                               /block
/dev                                 /bsg
/etc                                 /bus
/home                                /char
/lib                                 /disk
/media                               ~fd
/mnt                                 /input
/opt                                 /mapper
/proc                                /net
/root                                /pts
/sbin                                /shm
/selinux                             /snd
/srv                                 /syhpoon
/sys                                 /v4l
/tmp                                  .initramfs-tools
/usr                                 @MAKEDEV
/var                                 -adsp
@initrd.img                          -audio
@initrd.img.old                      -autofs
@vmlinuz                             @cdrom1
@vmlinuz.old                         @cdrw1
                                     -console
                                     @core
                                     -cpu_dma_latency
                                     -dsp
                                     @dvd1
/                    4K drwxr-xr-x   /                    4K drwxr-xr-x
```

grass

```
/                                                /dev
/..                                              /..
/bin                                             /.initramfs
/boot                                            /.udev
~cdrom                                           /block
/dev                                             /bsg
/etc                                             /bus
/home                                            /char
/lib                                             /disk
/media                                           ~fd
/mnt                                             /input
/opt                                             /mapper
/proc                                            /net
/root                                            /pts
/sbin                                            /shm
/selinux                                         /snd
/srv                                             /syhpoon
/sys                                             /v4l
/tmp                                              .initramfs-tools
/usr                                             @MAKEDEV
/var                                             -adsp
@initrd.img                                      -audio
@initrd.img.old                                  -autofs
@vmlinuz                                         @cdrom1
@vmlinuz.old                                     @cdrw1
                                                 -console
                                                 @core
                                                 -cpu_dma_latency
                                                 -dsp
                                                 @dvd1

/                        4K drwxr-xr-x    /                        4K drwxr-xr-x
```

glamour

```
{0 /} {1 UNIX} {2 usr}                              {0 dev}
┌────────────────────── / ──────────────────────┐┌───────────────────── /dev ─────────────────────┐
│/..                                             ││/..                                             │
│/bin                                            ││/.initramfs                                     │
│/boot                                           ││/.udev                                          │
│~cdrom                                          ││/block                                          │
│/dev                                            ││/bsg                                            │
│/etc                                            ││/bus                                            │
│/home                                           ││/char                                           │
│/lib                                            ││/disk                                           │
│/media                                          ││~fd                                             │
│/mnt                                            ││/input                                          │
│/opt                                            ││/mapper                                         │
│/proc                                           ││/net                                            │
│/root                                           ││/pts                                            │
│/sbin                                           ││/shm                                            │
│/selinux                                        ││/snd                                            │
│/srv                                            ││/syhpoon                                        │
│/sys                                            ││/v4l                                            │
│/tmp                                            ││ .initramfs-tools                               │
│/usr                                            ││@MAKEDEV                                        │
│/var                                            ││-adsp                                           │
│@initrd.img                                     ││-audio                                          │
│@initrd.img.old                                 ││-autofs                                         │
│@vmlinuz                                        ││@cdrom1                                         │
│@vmlinuz.old                                    ││@cdrw1                                          │
│                                                ││-console                                        │
│                                                ││@core                                           │
│                                                ││-cpu_dma_latency                                │
│                                                ││-dsp                                            │
│                                                ││@dvd1                                           │
│                                                ││                                                │
│/                                  4K drwxr-xr-x││/                                  4K drwxr-xr-x│
└────────────────────────────────────────────────┘└────────────────────────────────────────────────┘
|                                                
```

monochrome

```
{0 /} {1 UNIX} {2 usr}                          {0 dev}
┌──────────────────── / ────────────────────┐ ┌──────────────── /dev ──────────────┐
│/..                                         │ │/..                                 │
│/bin                                        │ │/.initramfs                         │
│/boot                                       │ │/.udev                              │
│~cdrom                                      │ │/block                              │
│/dev                                        │ │/bsg                                │
│/etc                                        │ │/bus                                │
│/home                                       │ │/char                               │
│/lib                                        │ │/disk                               │
│/media                                      │ │~fd                                 │
│/mnt                                        │ │/input                              │
│/opt                                        │ │/mapper                             │
│/proc                                       │ │/net                                │
│/root                                       │ │/pts                                │
│/sbin                                       │ │/shm                                │
│/selinux                                    │ │/snd                                │
│/srv                                        │ │/syhpoon                            │
│/sys                                        │ │/v4l                                │
│/tmp                                        │ │ .initramfs-tools                   │
│/usr                                        │ │@MAKEDEV                            │
│/var                                        │ │-adsp                               │
│@initrd.img                                 │ │-audio                              │
│@initrd.img.old                             │ │-autofs                             │
│@vmlinuz                                    │ │@cdrom1                             │
│@vmlinuz.old                                │ │@cdrw1                              │
│                                            │ │-console                            │
│                                            │ │@core                               │
│                                            │ │-cpu_dma_latency                    │
│                                            │ │-dsp                                │
│                                            │ │@dvd1                               │
│                                            │ │                                    │
│/                          4K drwxr-xr-x    │ │/                  4K drwxr-xr-x    │
└────────────────────────────────────────────┘ └────────────────────────────────────┘
|| |
```

Lighty (256 high colors mode)

```
{0 /} {1 UNIX} {2 usr}                              {0 dev}
┌──────────────────── / ────────────────┐   ┌──────────────── /dev ────────────────┐
│ /..                                    │   │ /..                                   │
│ /bin                                   │   │ /.initramfs                           │
│ /boot                                  │   │ /.udev                                │
│ ~cdrom                                 │   │ /block                                │
│ /dev                                   │   │ /bsg                                  │
│ /etc                                   │   │ /bus                                  │
│ /home                                  │   │ /char                                 │
│ /lib                                   │   │ /disk                                 │
│ /media                                 │   │ ~fd                                   │
│ /mnt                                   │   │ /input                                │
│ /opt                                   │   │ /mapper                               │
│ /proc                                  │   │ /net                                  │
│ /root                                  │   │ /pts                                  │
│ /sbin                                  │   │ /shm                                  │
│ /selinux                               │   │ /snd                                  │
│ /srv                                   │   │ /syhpoon                              │
│ /sys                                   │   │ /v4l                                  │
│ /tmp                                   │   │  .initramfs-tools                     │
│ /usr                                   │   │ @MAKEDEV                              │
│ /var                                   │   │ -adsp                                 │
│ @initrd.img                            │   │ -audio                                │
│ @initrd.img.old                        │   │ -autofs                               │
│ @vmlinuz                               │   │ @cdrom1                               │
│ @vmlinuz.old                           │   │ @cdrw1                                │
│                                        │   │ -console                              │
│                                        │   │ @core                                 │
│                                        │   │ -cpu_dma_latency                      │
│                                        │   │ -dsp                                  │
│                                        │   │ @dvd1                                 │
│ /                         4K drwxr-xr-x│   │ /                   4K drwxr-xr-x      │
└────────────────────────────────────────┘   └───────────────────────────────────────┘
| |
```

It is very easy to create your own skin theme!

Check the manual chapter for details:
http://xyzcmd.syhpoon.name/static/doc/user-manual/skins.html

FSRules

FSRules is a tiny DSL, widely-used in XYZCommander for describing filesystem objects.

FSRules are used for:
* Describing objects in skins
* Describing objects for custom actions
* Tagging files in panel
* More ...

Some FSRules examples

Tag all hidden files in current directory

Tag all files not owned by user syhpoon

{0 tmp} {1 UNIX} {2 usr}   {0 dev}

```
┌─ /tmp ─────────────────────────┐  ┌─ /dev ─────────────────────────┐
│/..                             │  │/..                             │
│/.A                             │  │/.initramfs                     │
│/.B                             │  │/.udev                          │
│/.C                             │  │/block                          │
│/.ICE-unix                      │  │/bsg                            │
│/.X11-unix                      │  │/bus                            │
│/emacs1000                      │  │/char                           │
│/home                           │  │/disk                           │
│/keyring-yPT40a                 │  │~fd                             │
│/orbit-syhpoon                  │  │/input                          │
│/plugtmp                        │  │/mapper                         │
│/ssh-pjyxzi1819        ┌───────────── Tag group ──────────────┐     │
│/svofe.tmp             │            Type FS Rule              │     │
│ .X0-lock              │                                      │     │
│ .a                    │ not owner{syhpoon}▌                  │     │
│ .b                    │                                      │     │
│ .c                    │   Press ENTER to submit value, ESCAPE to quit │
│ .d                    └──────────────────────────────────────┘     │
│=OSL_PIPE_1000_Single0                                              │
│=scim-helper-manager-s                                              │
│=scim-panel-socket:0-syhpoon      -audio                            │
│=scim-socket-frontend-syhpoon     -autofs                           │
│                                  @cdrom1                           │
│                                  @cdrw1                            │
│                                  -console                          │
│                                  @core                             │
│                                  -cpu_dma_latency                  │
│                                  -dsp                              │
│                                  @dvd1                             │
│          ─ 11 bytes (4) ─                                          │
│/home                20 drwxr-xr-x │  │/                4K drwxr-xr-x │
└────────────────────────────────┘  └────────────────────────────────┘
||
```

Tag all files with execution bit set

Tag those files which according to magic db match as avi movies.

```
{0 tmp} {1 UNIX} {2 usr}                                    {0 /}
┌─────────────── /tmp ──────────────┐      ┌──────────────────── / ──────────────┐
│ /..                               │      │ /..                                 │
│ /.A                               │      │ /bin                                │
│ /.B                               │      │ /boot                               │
│ /.C                               │      │ ~cdrom                              │
│ /.ICE-unix                        │      │ /dev                                │
│ /.X11-unix                        │      │ /etc                                │
│ /emacs1000                        │      │ /home                               │
│ /home                             │      │ /lib                                │
│ /keyring-yPT40a                   │      │ /media                              │
│ ~link.good                        │      │ /mnt                                │
│ /orbit-syhpoon                    │      │ /opt                                │
│ /plugtmp                    ┌─────────── Tag group ───────────┐
│ /ssh-pjyxzi11819            │        Type FS Rule              │
│ /sv2fn.tmp                  │                                  │
│ .X0-lock                    │ ┌──────────────────────────────┐ │
│ .a                          │ │magic("avi")█                 │ │
│ .b                          │ └──────────────────────────────┘ │
│ .c                          │                                  │
│ .d                          │  Press ENTER to submit value, ESCAPE to quit │
│ 289M                        └──────────────────────────────────┘
│ More-1GB                          │      │ @initrd.img                         │
│ =OSL_PIPE_1000_SingleOfficeIPC_c1c6bb8665e225cf22a45146~│ @initrd.img.old       │
│ *exe1                             │      │ @vmlinuz                            │
│ *exe2                             │      │ @vmlinuz.old                        │
│ *exe3                             │      │                                     │
│ file.txt                          │      │                                     │
│ !link.bad                         │      │                                     │
│ =scim-helper-manager-socket-syhpoon│     │                                     │
│ =scim-panel-socket:0-syhpoon      │      │                                     │
│ ──────── 432_254_096 bytes (1) ───│      │                                     │
│ /ssh-pjyxzi11819        23 drwx------│    │ /                      4K drwxr-xr-x │
└───────────────────────────────────┘      └─────────────────────────────────────┘
││
```

Tag all files with size exceeding 200 megabytes

```
{0 tmp} {1 UNIX} {2 usr}                                {0 /}
┌─────────────────── /tmp ──────────┐      ┌─────────────────── / ──────────────┐
/..                                        /..
/.A                                        /bin
/.B                                        /boot
/.C                                        ~cdrom
/.ICE-unix                                 /dev
/.X11-unix                                 /etc
/emacs1000                                 /home
/home                                      /lib
/keyring-yPT40a                            /media
~link.good                                 /mnt
/orbit-syhpoon                             /opt
/plugtmp
/ssh-pjyxzi11819 ──────────┌──────────────── Tag group ─────────────────┐
 .X0-lock                   │              Type FS Rule                  │
 .a                         │                                            │
 .b                         │ size{">200M"}                              │
 .c                         │                                            │
 .d                         │      Press ENTER to submit value, ESCAPE to quit │
 289M                       └────────────────────────────────────────────┘
 More-1GB
*exe1                                      @initrd.img
*exe2                                      @initrd.img.old
*exe3                                      @vmlinuz
 file.txt                                  @vmlinuz.old
!link.bad
=scim-helper-manager-socket-syhpoon
=scim-panel-socket:0-syhpoon
=scim-socket-frontend-syhpoon

        ── 2_045_781_136 bytes (3) ──
/ssh-pjyxzi11819                23 drwx------   /                        4K drwxr-xr-x

||
```

More rule actions and description how to create your own FSRule are available in XYZCommander user manual:

http://xyzcmd.syhpoon.name/static/doc/user-manual/fs_rules.html

Events & hooks

One can create hooks reacting on internal system events

Events & hooks

Run load() method when system starts:
self.xyz.hm.register("event:startup", self.load)

Run save() method when system stops:
self.xyz.hm.register("event:shutdown", self.save)

Run handler before executing the command:
self.xyz.hm.register("event:core:shell:execute", self.handler())

Useful hints

If something goes wrong:
logger window may help (META-l (lowercase L))

```
{0 /} {1 UNIX} {2 usr}                                    {0 UNIX}
                        ─ Logger console ─
[2010-04-29 23:57]: (ERROR) Error executing bind (<Shortcut: ['f5']>): Test ERROR!
[2010-04-29 23:57]: (DEBUG) Traceback (most recent call last):
  File "/home/syhpoon/UNIX/Work/Devel/Lang/python/Projects/xyzcmd/xyzcmd-trunk/libxyz/ui/panel.py", line 160, in
loop
    self._cmd.keypress(_dim, _input)
  File "/home/syhpoon/UNIX/Work/Devel/Lang/python/Projects/xyzcmd/xyzcmd-trunk/libxyz/ui/cmd.py", line 312, in
keypress
    return _meth()
  File "<string>", line 182, in x
RuntimeError: Test ERROR!
```

See active plugins exported methods, doc, events etc (META-t)

```
{0 /} {1 UNIX} {2 usr}                          {0 UNIX}
┌────────────────────────── Active plugins list ──────────────────────────┐
│:core:bindlist          0.2 - Show keybindings                            │
│:core:console           0.1 - Interactive management console              │
│:core:keycodes          0.1 - Setup terminal keycodes                     │
│:core:pluginlist        0.2 - Show plugin list                            │
│:fsrules:magic          0.1 - Magic database FSRule                       │
│:misc:about             0.1 - About plugin                                │
│:misc:where             0.2 - Save panels locations                       │
│:sys:cmd                0.1 - Command line plugin                         │
│:sys:logger             0.1 - Logger plugin                               │
│:sys:panel              0.1 - Panel plugin                                │
│:sys:run                0.1 - Run plugin                                  │
│:ui:bookmarks           0.1 - Frequently used directories                │
│:ui:testinput           0.1 - Test input                                 │
│:vfs:fileinfo           0.1 - Show VFS object information                │
│:vfs:vfsutils           0.1 - Useful VFS routines                        │
```