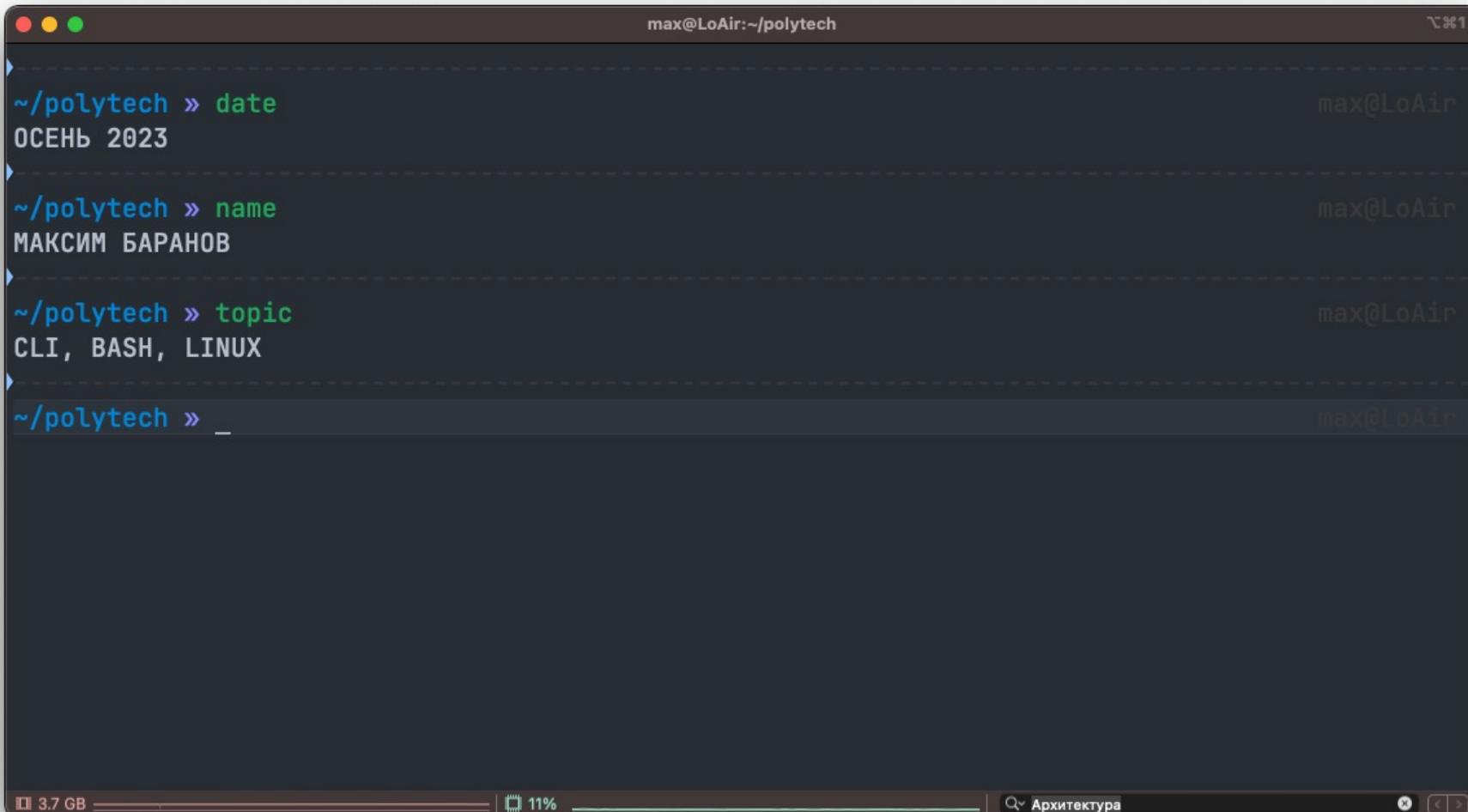


ИНФОРМАТИКА



A screenshot of a terminal window titled "max@LoAir:~/polytech". The window contains the following command-line session:

```
~/polytech » date
ОСЕНЬ 2023

~/polytech » name
МАКСИМ БАРАНОВ

~/polytech » topic
CLI, BASH, LINUX

~/polytech » _
```

The terminal has a dark background with light-colored text. The prompt is blue. The session shows the user running commands like "date", "name", and "topic", and ends with an empty command line.



Линус Торвальдс

ТАК ЧТО ЖЕ ТАКОЕ LINUX?

Linux – это UNIX-подобная операционная система, которой никто не пользуется, из-за ее слишком большой стабильности и производительности.

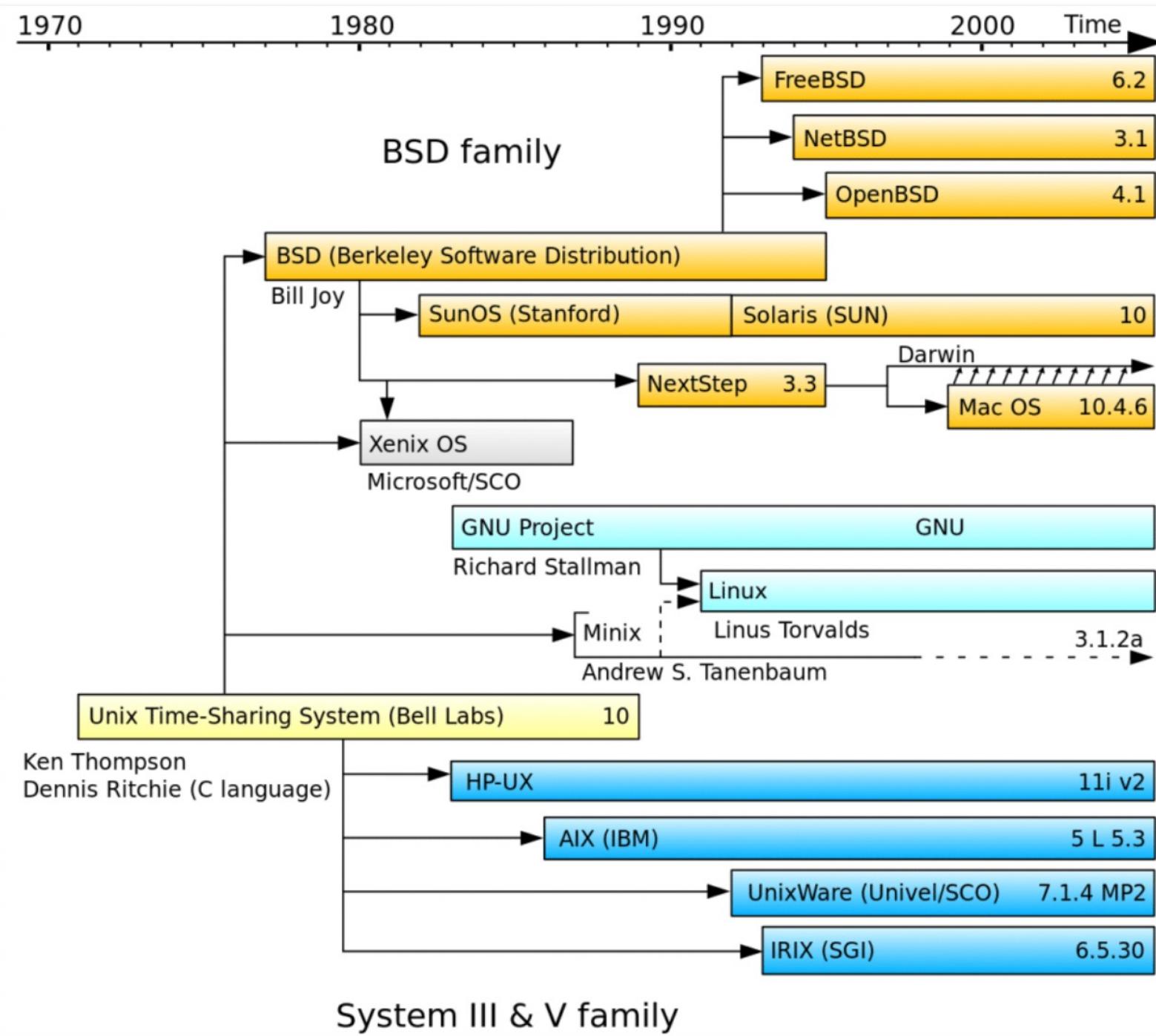


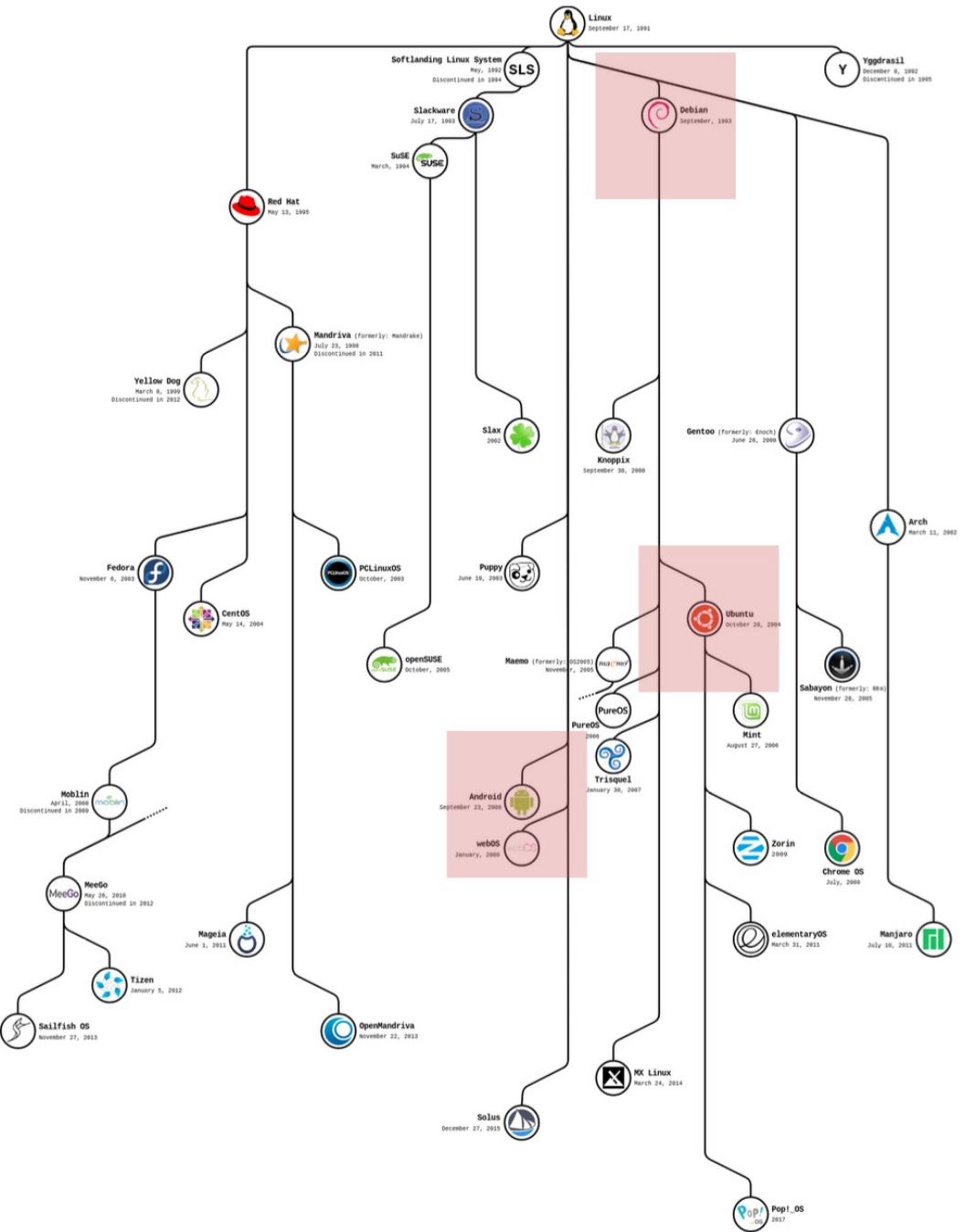
ЧТО ЗНАЧИТ UNIX-ПОДОБНАЯ?

Linux- операционная система, которая образовалась под влиянием UNIX. Термин включает свободное/открытые ОС, образованные от UNIX компании «Bell Labs» или эмулирующие его возможности, коммерческие и запатентованные разработки, а также версии, основанные на исходном коде *UNIX*. Нет стандарта, определяющего термин, и допустимы различные точки зрения о том, считать определённый продукт *UNIX*-подобным или нет.

ИСТОРИЯ СОЗДАНИЯ

Датой создания ОС Linux можно считать 25 августа 1991г.
С момента выхода первой версии ОС Linux дальнейшее развитие
ядра шло по принципу, неизменному и сейчас: параллельно
создаются две ветки – стабильная и экспериментальная.





ПЛЮСЫ

- Обладает высокой надёжностью и имеет отличную систему защиты.
- Вирусы написанные под Windows не работают (не активны) под Linux .
- Операционная система распространяются с открытым кодом, что дает возможность вносить изменения.

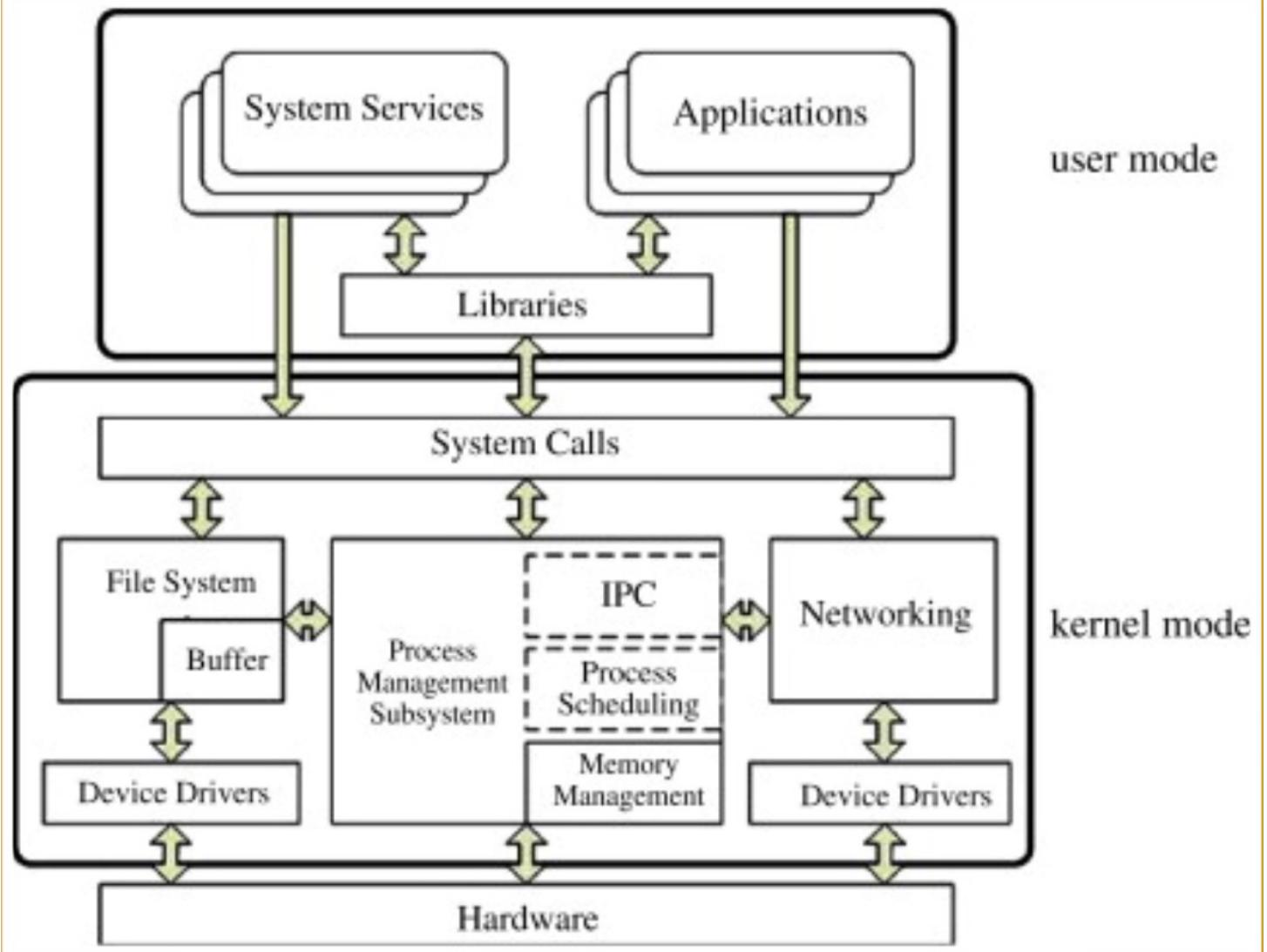
МИНУСЫ

- Дистрибутивы Linux, не ориентированы на конкретные платформы и круг клиентов (как и Windows). В отличие от Unix, которые прекрасно знают поддерживаемые ими устройства, следовательно их драйверы работают лучше.
- В Linux-сообществе не существует строгого стандартного набора инструментов или сред, к примеру: отличаются системой управления пакетами. Эта недостаточная стандартизованность приводит к значительным несогласованностям внутри Linux.
- Не поддерживает приложения разработанные для Windows операционных систем (возможен запуск только через эмулятор).

Логотип

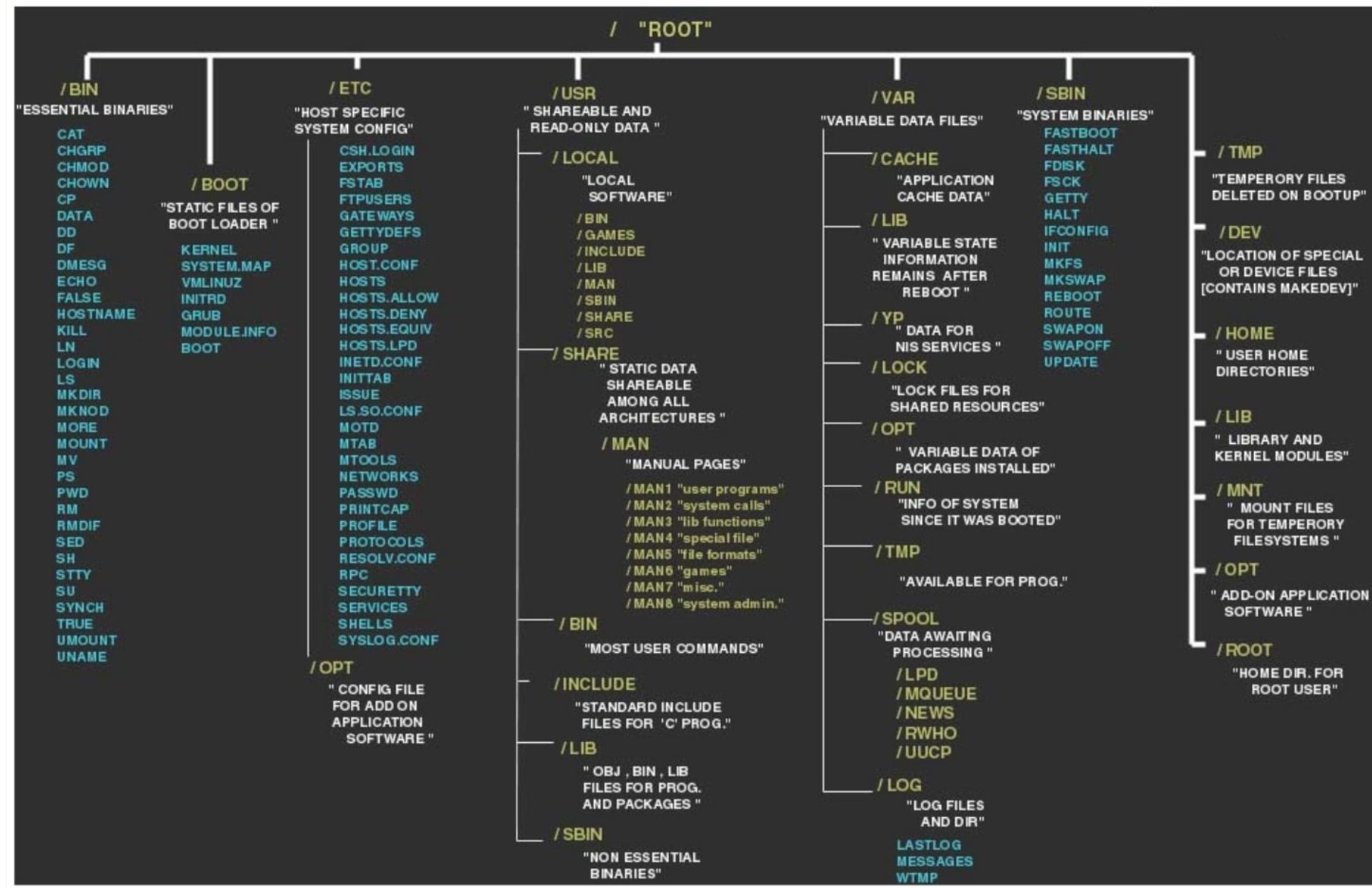
Официальным логотипом и талисманом Linux является пингвин Tux. Который был создан в 1996 г Ларри Юингом.





Архитектура Linux

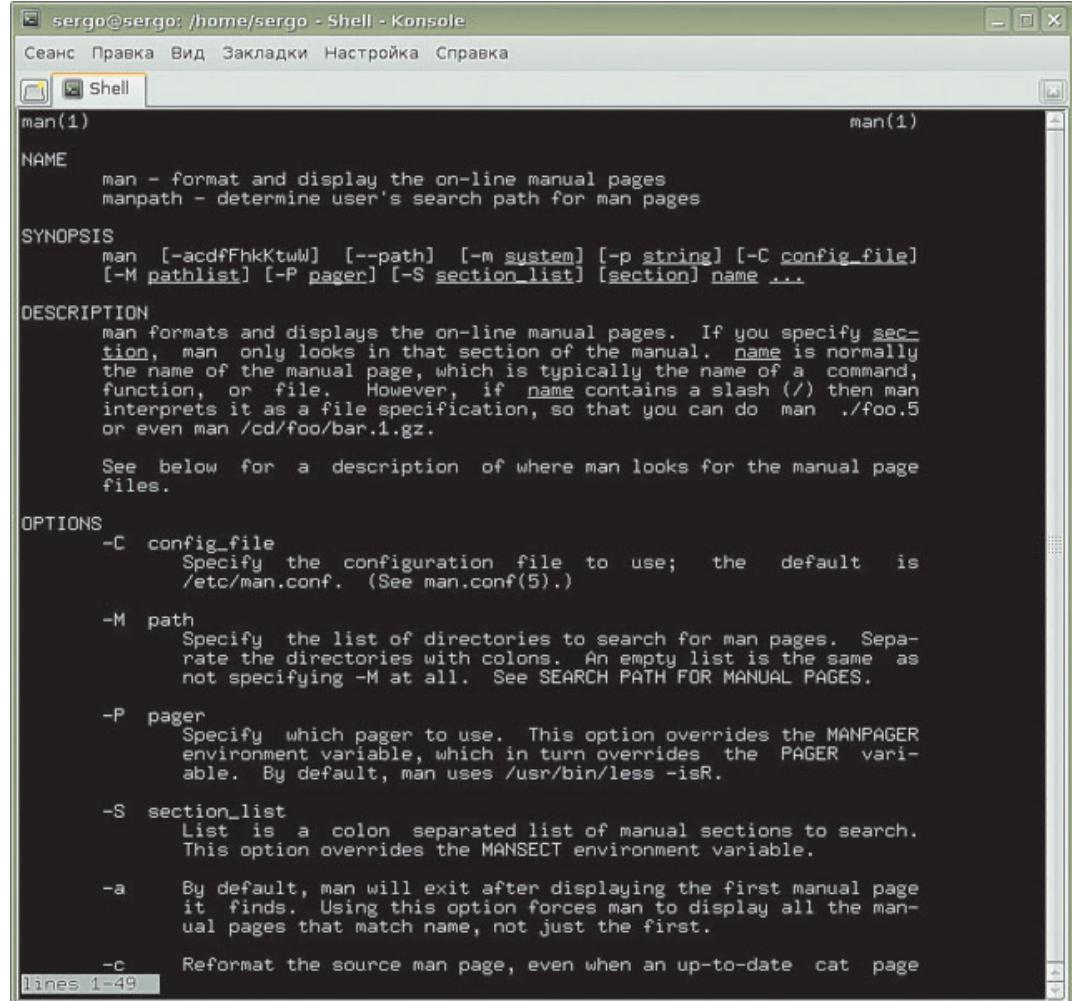




Иерархия файлов

Консоль linux

Через консоль Linux можно управлять системой и файлами, править конфиги, писать тексты, смотреть фото, кино, ролики с YouTube, слушать музыку, бороздить просторы интернета и многое чего ещё. И это всё - при минимальном потреблении ресурсов машины и хорошей скорости.



The screenshot shows a terminal window titled "sergo@sergo: /home/sergo - Shell - Konsole". The window displays the man(1) manual page for the "man" command. The page is divided into sections: NAME, SYNOPSIS, DESCRIPTION, OPTIONS, and a footer. The NAME section defines "man" as a command to format and display online manual pages. The SYNOPSIS section shows the command line options: man [-acdfFhkKtwW] [--path] [-m system] [-p string] [-C config_file] [-M pathlist] [-P pager] [-S section_list] [section] name The DESCRIPTION section explains that "man" looks in the specified section of the manual if a section is provided, or in the first section if none is. It also mentions that if a file path contains a slash, it is treated as a file specification. The OPTIONS section details each option: -C config_file specifies the configuration file (default is /etc/man.conf), -M path specifies the list of directories to search (empty list is the same as no -M), -P pager specifies the pager (overrides MANPAGER environment variable, which overrides PAGER), -S section_list specifies a colon-separated list of sections to search (overrides MANSECT), -a forces all matching pages to be displayed, and -c reformats the source man page even if up-to-date. The footer shows the status line "lines 1-49".

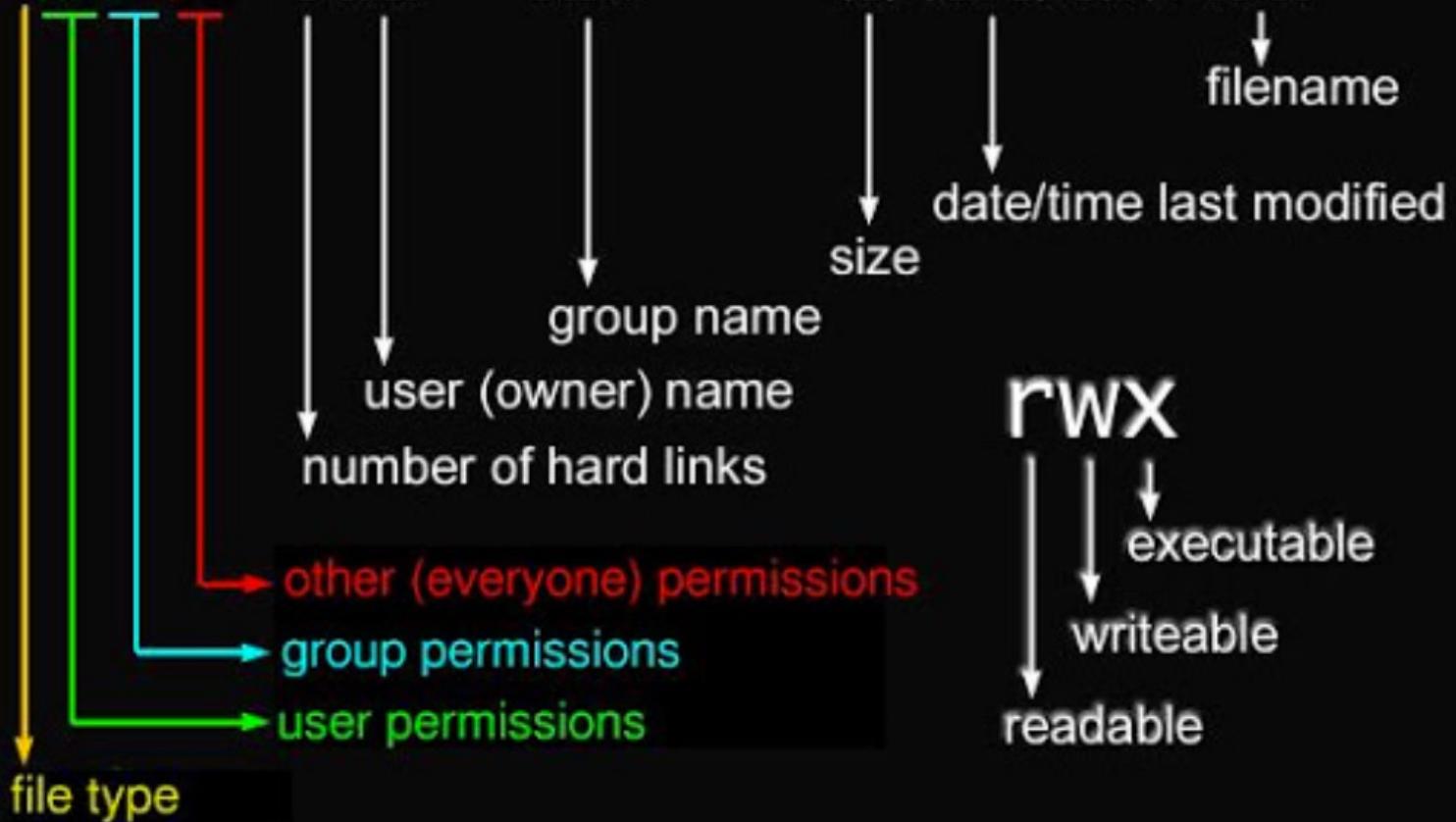
```
sergo@sergo: /home/sergo - Shell - Konsole
Сеанс Правка Вид Закладки Настройка Справка
Shell
man(1) man(1)
NAME
man - format and display the on-line manual pages
manpath - determine user's search path for man pages
SYNOPSIS
man [-acdfFhkKtwW] [--path] [-m system] [-p string] [-C config_file]
[-M pathlist] [-P pager] [-S section_list] [section] name ...
DESCRIPTION
man formats and displays the on-line manual pages. If you specify sec-
tion, man only looks in that section of the manual. name is normally
the name of the manual page, which is typically the name of a command,
function, or file. However, if name contains a slash (/) then man
interprets it as a file specification, so that you can do man ./foo.5
or even man /cd/foo/bar.1.gz.
See below for a description of where man looks for the manual page
files.
OPTIONS
-C config_file
    Specify the configuration file to use; the default is
    /etc/man.conf. (See man.conf(5).)
-M path
    Specify the list of directories to search for man pages. Sepa-
    rate the directories with colons. An empty list is the same as
    not specifying -M at all. See SEARCH PATH FOR MANUAL PAGES.
-P pager
    Specify which pager to use. This option overrides the MANPAGER
    environment variable, which in turn overrides the PAGER vari-
    able. By default, man uses /usr/bin/less -isR.
-S section_list
    List is a colon separated list of manual sections to search.
    This option overrides the MANSECT environment variable.
-a
    By default, man will exit after displaying the first manual page
    it finds. Using this option forces man to display all the man-
    ual pages that match name, not just the first.
-c
    Reformat the source man page, even when an up-to-date cat page
lines 1-49
```

CLI (COMMAND LINE INTERFACE) –

УПРАВЛЕНИЕ ПРОГРАММАМИ С
ПОМОЩЬЮ КОМАНД. КОМАНДЫ
СОСТОЯТ ИЗ БУКВ, ЦИФР,
СИМВОЛОВ, НАБИРАЮТСЯ
ПОСТРОЧНО, ВЫПОЛНЯЮТСЯ ПОСЛЕ
НАЖАТИЯ КЛАВИШИ ENTER.



```
shum@sol:~$ ls -l
total 20
drwx----- 2 shum    staff      4096 Jan 16 22:04 Mail
drwx----- 3 shum    staff      4096 Jan 16 14:15 csc128
drwxr-xr-x  2 shum    staff      4096 Jan 13 16:42 public
drwxr-xr-x  2 shum    staff      4096 Jan 16 14:07 public_html
-rw-r--r--  1 shum    staff      628  Jan 15 20:04 verse
```



```
max@LoAir:~/polytech/test ▶
```

```
►* ~/polytech/ pwd  
/Users/max/polytech  
►* ~/polytech/ ls -l  
total 8  
drwxr-xr-x@ 3 max staff 96 31 авг 13:24 test  
-rw-r--r--@ 1 max staff 158 30 авг 14:06 topics.sh  
►* ~/polytech/ ls -la  
total 8  
drwxr-xr-x 4 max staff 128 31 авг 13:24 .  
drwxr-xr-x+ 63 max staff 2016 31 авг 13:26 ..  
drwxr-xr-x@ 3 max staff 96 31 авг 13:24 test  
-rw-r--r--@ 1 max staff 158 30 авг 14:06 topics.sh  
►* ~/polytech/ tree  
. .  
└── test  
    └── test1  
        └── test2  
    └── topics.sh  
  
4 directories, 1 file  
►* ~/polytech/ cd test  
►* ~/polytech/test/ pwd  
/Users/max/polytech/test  
►* ~/polytech/test/ tree  
. .  
└── test1  
    └── test2  
  
3 directories, 0 files  
►* ~/polytech/test/ _
```

Навигация

```
max@LoAir:~/polytech
* ~/ cd polytech
* ~/polytech/ cd test
* ~/polytech/test/ tree
.
└── test1
    └── test2

3 directories, 0 files
* ~/polytech/test/ touch file.txt
* ~/polytech/test/ ls -la
total 0
drwxr-xr-x@ 4 max  staff  128 31 авг 13:31 .
drwxr-xr-x  4 max  staff  128 31 авг 13:24 ..
-rw-r--r--@ 1 max  staff     0 31 авг 13:31 file.txt
drwxr-xr-x@ 3 max  staff   96 31 авг 13:24 test1
* ~/polytech/test/ cp ./file.txt ./test1/copy_of_file.txt
* ~/polytech/test/ cd ..
* ~/polytech/ tree
.
└── test
    ├── file.txt
    └── test1
        └── copy_of_file.txt
            └── test2
    └── topics.sh

4 directories, 3 files
* ~/polytech/ rm ./test/test1/copy_of_file.txt
* ~/polytech/ _
```

Работа с файлами

```
max@LoAir:~/polytech/test
* ~/polytech/ tree
.
└── test
    ├── file.txt
    └── test1
        └── test2
    topics.sh

4 directories, 2 files
* ~/polytech/ cd test
* ~/polytech/test/ cp ./test1 ./copy_of_test1
cp: ./test1 is a directory (not copied).
* ~/polytech/test/ cp -r ./test1 ./copy_of_test1
* ~/polytech/test/ tree
.
└── copy_of_test1
    └── test2
    └── file.txt
    └── test1
        └── test2

5 directories, 1 file
* ~/polytech/test/ rm -rf copy_of_test1
* ~/polytech/test/ tree
.
└── file.txt
└── test1
    └── test2

3 directories, 1 file
 4.3 GB | 12% | 1.0 kB↓ | 1.0 kB↑ | Q~
```

Работа с каталогами

<i>Символ в шаблоне</i>	<i>Назначение</i>	<i>Примеры шаблона</i>	<i>Примеры подходящих под шаблон файлов</i>
*	Обозначает любое количество любых символов, в том числе и их отсутствие.	*.html	index.html news5.10.html filial.html
		my*.odt	my_balans.odt mydata.odt myriad.odt my.odt
		2010	January2010.ods music2010 1.2010_music
?	Один любой символ.	otchet.???	otchet.txt otchet.odt
		descrip?ion.pdf	description.pdf descripsion.pdf
		release???.2010*	release25.04.2010 release01.05.2010.out
[]	Любой символ из перечня или диапазона.	[m-pM-P]???.png	Open.png maps.png nono.png

```
Left      File      Command      Options      Right
<- ~ .[^\>] <- ~ .[^\>
'n     Name      Size  Modify time  'n     Name      Size  Modify time
/..          UP--DIR Feb  3 13:24   /..          UP--DIR Feb  3 13:24
/.cache       4096   Feb  3 13:30   /.cache       4096   Feb  3 13:30
/.config      4096   Feb  3 13:30   /.config      4096   Feb  3 13:30
/.local
/Docume
/Pictur
/bin
.bash_
.bash_
.bashr
.lesshst      68    Feb  3 13:44   .lesshst      68    Feb  3 13:44
.profile      675   Feb  3 13:24   .profile      675   Feb  3 13:24
.viminfo      647   Feb  3 13:54   .viminfo      647   Feb  3 13:54
.bash_history
UP--DIR
2996M/5872M (51%) 2996M/5872M (51%)
Create a new Directory
Enter directory name:
playground
[< OK >] [ Cancel ]
```

```
max@LoAir:~/polytech/test
▶ ~/polytech/test/ echo "Test text"
Test text
▶ ~/polytech/test/ ls
NoTimeToDie.txt test1
▶ ~/polytech/test/ head NoTimeToDie.txt
I should've known
I'd leave alone
Just goes to show
That the blood you bleed
Is just the blood you owe
We were a pair
But I saw you there
Too much to bear
You were my life
But life is far away from fair
▶ ~/polytech/test/ tail NoTimeToDie.txt
Fool me once, fool me twice
Are you death or paradise?
Now you'll never see me cry
There's just no time to die
No time to die
No time to die
Fool me once, fool me twice
Are you death or paradise?
Now you'll never see me cry
There's just no time to die
▶ ~/polytech/test/ cat NoTimeToDie.txt
```

Работа с содержимым файлов

```
max@LoAir:~/polytech/test
► ~/polytech/test/ grep "No time to die" ./NoTimeToDie.txt
No time to die
No time to die
► ~/polytech/test/ grep "No time to die" ./NoTimeToDie.txt -n
30:No time to die
31:No time to die
► ~/polytech/test/ nano ./NoTimeToDie.txt
```

Работа с содержимым файлов

UW PICO 5.09

nano ./NoTimeToDie.txt

I should've known
I'd leave alone
Just goes to show
That the blood you bleed
Is just the blood you owe
We were a pair
But I saw you there
Too much to bear
You were my life
But life is far away from fair
Was I stupid to love you?
Was I reckless to help?
Was it obvious to everybody else
That I'd fallen for a lie?
You were never on my side
Fool me once, fool me twice
Are you death or paradise?
Now you'll never see me cry
There's just no time to die
I let it burn
You're no longer my concern
Faces from my past return
Another lesson yet to learn
That I'd fallen for a lie
You were never on my side

File: ./NoTimeToDie.txt

^G Get Help ^O WriteOut ^R Read File ^Y Prev Pg ^K Cut Text ^C Cur Pos
^X Exit ^J Justify ^W Where is ^V Next Pg ^U UnCut Text ^T To Spell

Сохраняем изменения:

1. Ctrl + O
2. Enter

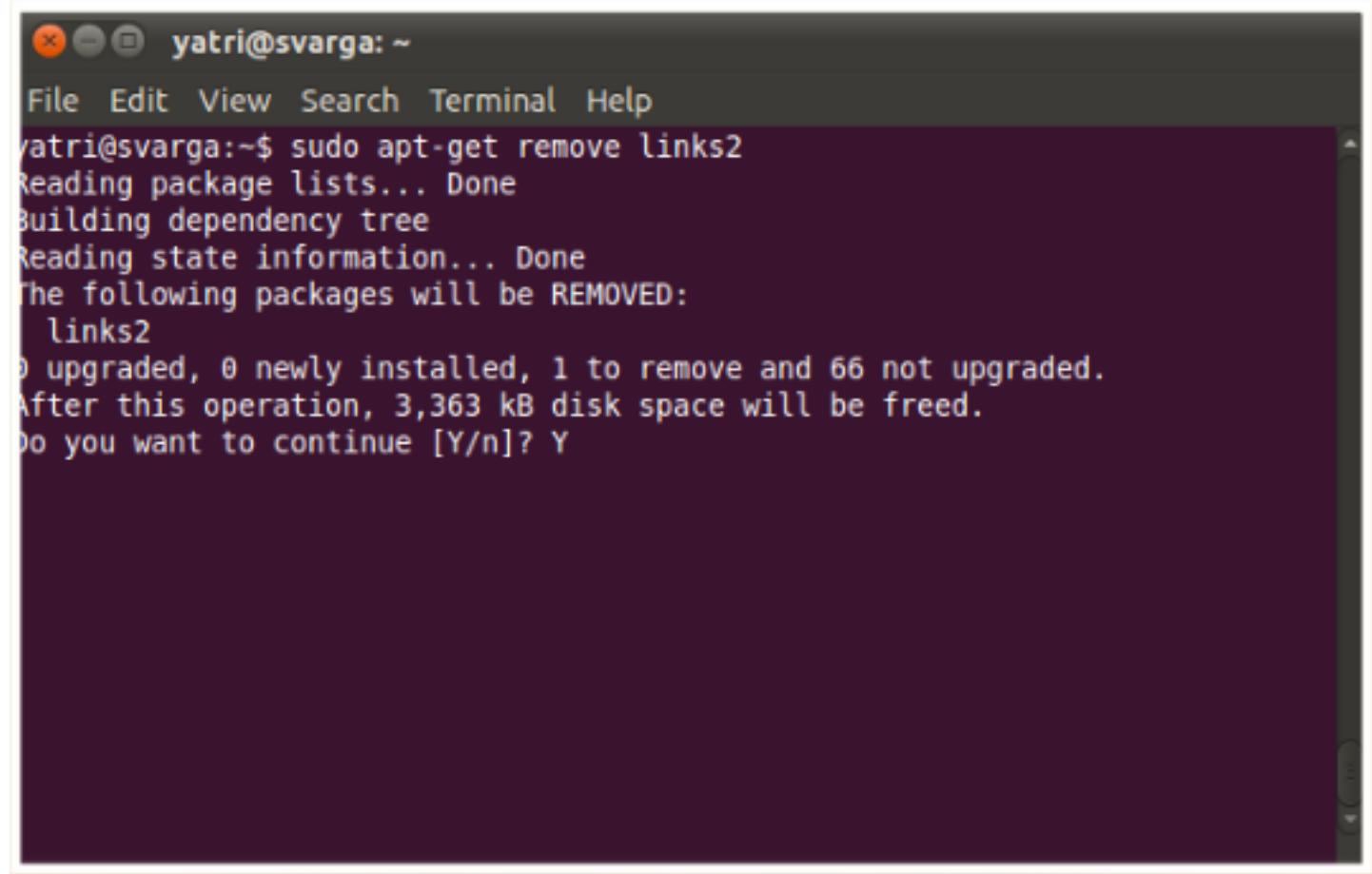
Выходим:
Ctrl + X

yatri@svarga: ~

File Edit View Search Terminal Help

```
yatri@svarga:~$ sudo apt-get install gnome-chess
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following extra packages will be installed:
  gnuchess gnuchess-book libxcb-render-util0
Suggested packages:
  xboard eboard
The following NEW packages will be installed:
  gnome-chess gnuchess gnuchess-book libxcb-render-util0
0 upgraded, 4 newly installed, 0 to remove and 66 not upgraded.
Need to get 2,898 kB of archives.
After this operation, 5,349 kB of additional disk space will be used.
Do you want to continue [Y/n]? Y
```

Установка программ



A screenshot of a terminal window titled "yatri@svarga: ~". The window has a dark background and light-colored text. At the top, there's a menu bar with "File", "Edit", "View", "Search", "Terminal", and "Help". Below the menu, the command "sudo apt-get remove links2" is entered. The terminal displays the output of this command, which includes reading package lists, building a dependency tree, and determining the state information. It then lists the package "links2" as being removed. The output also shows that 0 packages are upgraded or newly installed, 1 package is to be removed, and 66 packages are not upgraded. After this operation, 3,363 kB of disk space will be freed. Finally, the terminal asks if the user wants to continue with the operation, with "Y" as the response.

```
yatri@svarga:~$ sudo apt-get remove links2
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages will be REMOVED:
  links2
0 upgraded, 0 newly installed, 1 to remove and 66 not upgraded.
After this operation, 3,363 kB disk space will be freed.
Do you want to continue [Y/n]? Y
```

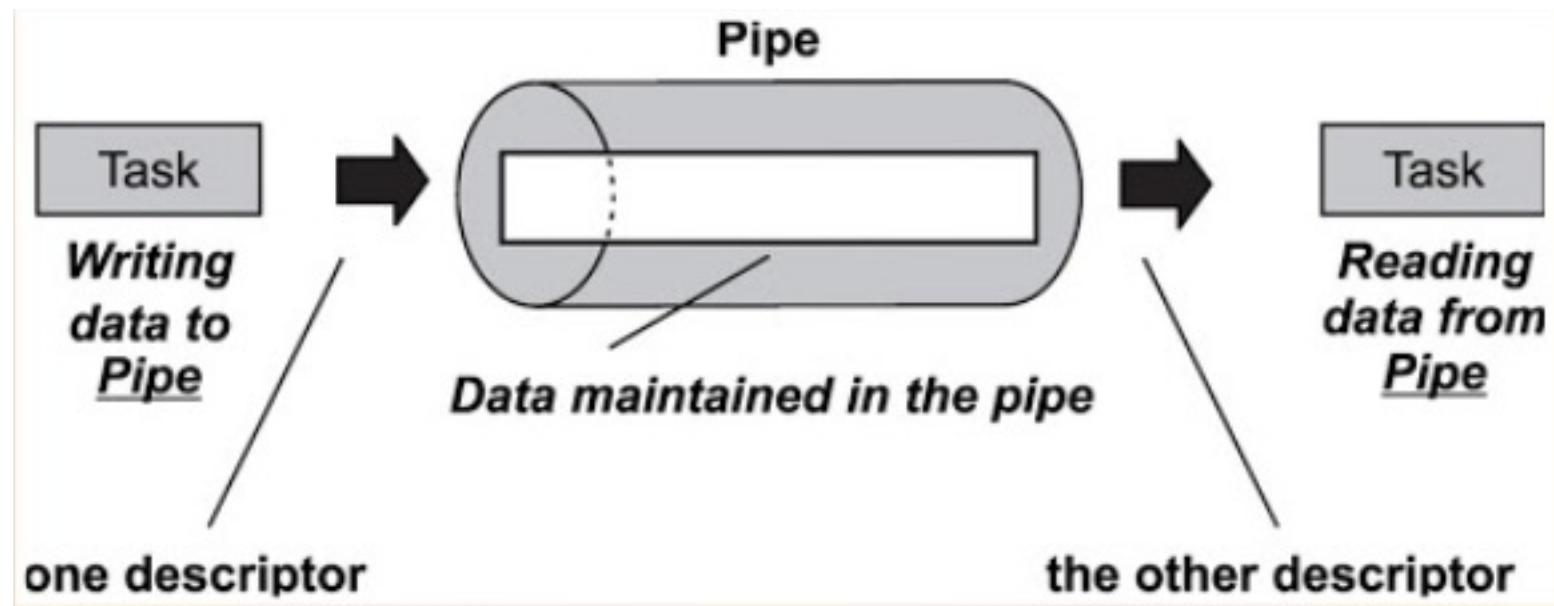
Удаление программ

```
max@LoAir:~/polytech
* ~/polytech/ ls -l
total 16
-rw-r--r--@ 1 max  staff  33 31 авг 14:51 hello.sh
drwxr-xr-x@ 4 max  staff  128 31 авг 13:48 test
-rw-r--r--@ 1 max  staff  158 30 авг 14:06 topics.sh
* ~/polytech/ cat hello.sh
#!/bin/bash
echo "Hello, World!"
* ~/polytech/ ./hello.sh
zsh: permission denied: ./hello.sh
* ~/polytech/ chmod +x ./hello.sh
* ~/polytech/ ./hello.sh
Hello, World!
* ~/polytech/
```

Запуск скриптов

```
max@LoAir:~/polytech
▶* ~/polytech/ ls -l > out.txt
▶* ~/polytech/ cat out.txt
total 16
-rwxr-xr-x@ 1 max  staff  33 31 авг 14:51 hello.sh
-rw-r--r--@ 1 max  staff   0 31 авг 14:56 out.txt
drwxr-xr-x@ 4 max  staff 128 31 авг 13:48 test
-rw-r--r--@ 1 max  staff 158 30 авг 14:06 topics.sh
▶* ~/polytech/ grep sh < out.txt
-rwxr-xr-x@ 1 max  staff  33 31 авг 14:51 hello.sh
-rw-r--r--@ 1 max  staff 158 30 авг 14:06 topics.sh
▶* ~/polytech/ ls -l >> out.txt
▶* ~/polytech/ cat out.txt
total 16
-rwxr-xr-x@ 1 max  staff  33 31 авг 14:51 hello.sh
-rw-r--r--@ 1 max  staff   0 31 авг 14:56 out.txt
drwxr-xr-x@ 4 max  staff 128 31 авг 13:48 test
-rw-r--r--@ 1 max  staff 158 30 авг 14:06 topics.sh
total 24
-rwxr-xr-x@ 1 max  staff  33 31 авг 14:51 hello.sh
-rw-r--r--@ 1 max  staff 225 31 авг 14:56 out.txt
drwxr-xr-x@ 4 max  staff 128 31 авг 13:48 test
-rw-r--r--@ 1 max  staff 158 30 авг 14:06 topics.sh
▶* ~/polytech/ _
```

Перенаправление потоков



Конвейризация программ



```
max@LoAir:~/polytech
►* ~/polytech/ cat out.txt
total 16
-rwxr-xr-x@ 1 max staff 33 31 авг 14:51 hello.sh
-rw-r--r--@ 1 max staff 0 31 авг 14:56 out.txt
drwxr-xr-x@ 4 max staff 128 31 авг 13:48 test
-rw-r--r--@ 1 max staff 158 30 авг 14:06 topics.sh
total 24
-rwxr-xr-x@ 1 max staff 33 31 авг 14:51 hello.sh
-rw-r--r--@ 1 max staff 225 31 авг 14:56 out.txt
drwxr-xr-x@ 4 max staff 128 31 авг 13:48 test
-rw-r--r--@ 1 max staff 158 30 авг 14:06 topics.sh
►* ~/polytech/ cat out.txt | sort
-rw-r--r--@ 1 max staff 0 31 авг 14:56 out.txt
-rw-r--r--@ 1 max staff 158 30 авг 14:06 topics.sh
-rw-r--r--@ 1 max staff 158 30 авг 14:06 topics.sh
-rw-r--r--@ 1 max staff 225 31 авг 14:56 out.txt
-rwxr-xr-x@ 1 max staff 33 31 авг 14:51 hello.sh
-rwxr-xr-x@ 1 max staff 33 31 авг 14:51 hello.sh
drwxr-xr-x@ 4 max staff 128 31 авг 13:48 test
drwxr-xr-x@ 4 max staff 128 31 авг 13:48 test
total 16
total 24
►* ~/polytech/ _
```

Конвейризация программ



I Am Devloper
@iamdevloper



[Follow](#)

Я использую Vim уже почти 2 года, потому что не знаю, как выйти из него.

RETWEETS

13,622

LIKES

7,155



12:26 AM - 18 Feb 2014

Esc NormalRevision 2.0
Sept. 11, 2011
Vim 7.3+
:version

Vim Cheat Sheet for Programmers

Copyleft © 2011
May be freely distributed:
<http://michael.PeopleOfHonorOnly.com/vim/>
Sharing is Caring.HOW-TO make Vim not suck Out of the Box: **:help statusline** :set nocompatible ruler laststatus=2 showcmd showmode number

Search :set incsearch ignorecase smartcase hisearch

Remove useless splash screen :set shortmess+=l

Best tips: <http://vim.wikia.com/>

:map <F9> :e \$HOME/.vimrc<CR> :map <F6> :so \$HOME/.vimrc<CR>

Ctrl-`

Ctrl 1

Ctrl @

Ctrl 3

Ctrl 4

Ctrl 5

Ctrl ^

Ctrl 7

Ctrl 8

Ctrl 9

Ctrl 0

Ctrl _

Ctrl =

~ toggle case

! exten filter

@ play macro

prev identifier

\$ →

% goto match

^ soft →

& repeat :s

* next identifier

(begin sentence

_ cur line

+ ↓ auto-format

` goto mark

1

2

3

4

5

6

7

8

9

0 hard →

↑

=

Tab

Q ex mode

W WORD ↴

E end WORD ↴

R Replace

T ← until char

Y copy line

U undo line

I insert ↵

O open ↑

P paste ↑

{ paragraph

} paragraph

Caps

A incr. #

S subst line

D del →

F ← find char

G goto eof /

ctrl H

ctrl J

ctrl I

ctrl L

ctrl M

ctrl N

ctrl O

Ctrl ^

:suspend

7.11 decr. #

Normal / Cancel

block select

page ↑

page ↓

file(cursor) info

ctrl H

ctrl J

ctrl I

ctrl L

ctrl M

Shift ↑

Z quit

X ← del char

C change →

V select lines

B ↴ WORD

N "prev"

M Middle screen

< indent

ctrl ,

> indent

?• find ↵

ctrl /

Z extra

x del char →

C change

V select chars

b ↴ word

n find "next"

m set mark

, "prev" 16

· repeat cmd

/• find ↵

Legend:

Macro Register name (**0-9-a-Z**) required

Op Motion req.; act between cursor & dst

Cmd Command

Ins Command and enter insert mode

Move Moves cursor or defines range for op

Find Search (**** = reverse, **^** = forward)

tag ctags / diff / folding

Code Code formatting, whitespace, etc.

Extra Extended functionality; req. extra chars

Char arg req. **g z Z ^w :** ...

Modes :help modes

n Normal Esc ^[^c

i Insert a i r s

v Visual v V ^v ^q

o Op pending c d y < >

c Command Line : / ? !

word Foo (src , b dst , b len);

Note: There is no whitespace in-between "Foo(src," but before/after "dst."

WORD Foo (src , b dst , b len);

Startup vim <filename> +123 goto line 123

vim <file> ... -t Foo edit at tag 'Foo'

vim <file> ... -c "/Foo" cmd: find 'Foo' & edit

GUI vim -g or gvim start GUI ver.

GUI Linux :set guifont=ProggyTinyTT\ 12

GUI OSX :set guifont=ProggyTinyTT\:11

diff-gvmdiff <file1> <file2> <file3>

bug Broken Keys Ctrl-I = Tab, Ctrl-[= ESC

Vim is still unable to map certain keys for your own use...

Caps, Ctrl-1, Ctrl-Shift-1, Ctrl-I, Ctrl-, etc.

0 See: src/ops.c -c "/valid_yank_reg" for ^ reg. names

6 See: src/normal.c -c "/nv_cmds" for g* extra cmds

11 See: src/edit.c -c "/ctrl_x_mesa" for ^x insert cmds

:help cmdline :r file insert file

:w save :gui switch to GUI

:q quit :q! quit w/o save

:e <file> edit file

:source % exec cmd in cur file

:exec '...' do cmd

:help movement

soft ^ ← Start of Line 1st non-whitespace

hard 0 ← Start of Line column 0

\$ → End of Line

| move col 0 # | move col #

^b page ↑ ^f page ↓

^u ½ page ↑ ^d ½ page ↓

^e scroll line ↑ ^y scroll line ↓

lg start of file og end of file

#g goto line # G end of file

!! begin this func {

!! begin next func {

:set matchpairs=(.)().[]:<>?:{}

^ goto matching {} <> []

:help range

:s/Foo/Bar/ find Foo replace w/ Bar

:is/Foo/Bar/g ...all instances on line

:is/Foo/Bar/g apply to whole file

...# cur line, cur line + # lines

\$ last line < start of select

> end of select

:set tabstop=8

:set backspace=indent,eol,start

allow backspace join lines

:set shiftwidth=8 indent width for ai

:set autoindent toggle auto-indent

:set lisp lisp indent mode

:set nowrap +:s/^/\n//<CR>, block comment

:set noswapbufs +:s/^/\n//<CR>, uncomment

:help tags

:its list active tags

:^] jump to tag under cursor

:^t restore cursor before tag jump

:^p complete word

:ta Foo manual jump to tag 'Foo'

:help diff

[:c prev diff :hi DiffAdd guifg=#rrggbb

[:c next diff :hi DiffChange guibg=#rrggbb

:diffupdate :hi DiffText gui=None

resync :hi DiffDelete

:help folding

:zR fold remove

:zo fold open

:zc fold close

:zi invert all

:zr fold reduce

:zm fold more

:syntax enable

:set filetype=

c cpp sh make perl python

Note: chose only ONE type!

:q* start recording

@* playback

q* stop recording

@@ repeat

:set fileformat=

unix or dos or mac

then :w to convert

:set tabstop every #th col

:set expandtab!

toggle hard/soft tabs

:set listchars=:

tab:>;trail:-;nbsp%;eol:\$

:set list!

toggle whitespace

:set nowrap!

visible right margin indicator

noremap - :s/^/\n//<CR>

:uncomment

:map \ :Explore<CR> manually type <C,R,>

\$0 * before del/copy/paste to use register

"+x cut to system clipboard reg. '+'

"+gp paste from system clipboard

1 Number before any action repeats it

2p paste twice 3. repeat thrice

2 Repeat op to act on current line

YY copy line dd line

<< undent line >> indent line

3 # highlight words under cursor

4 zz save & quit zq quit w/o save

5 zz center cursor line in window

zh scroll left zl scroll right

zt scroll top zb scroll bottom

\$6 gg top of file

gf open file under cursor

7 ^a incr # under cursor (Dec / Hex)

^x decr # under cursor (Dec / Hex)

8 * start a "new" search

9 ^p prev auto-complete " next

10 ^d undent ^t indent

\$11 ^x^f filename completion

^s spelling :set spell!

^k dictionary ls next bad

^t thesaurus :help spell

^o clipboard (or '*) :help c_CTRL-R

" last del/copy t filename

:set numbers! toggle line numbers

:set wrap! toggle linewrap display

:set showmatch highlight matching ()

:set numbers! toggle line numbers

:set nowrap!

:noremap - :s/^/\n//<CR>

:uncomment

:buffer #

:buffers list

:new blank file/buffer

:bn next file

:bp prev file

:bd close file

:set lines=8

:set columns=8

:winpos #

Windows

:help windows

^w or :wincmd *

w :switch to next

c :close!

n :new

s :split horz.

v :vsplits vertical

o :only maximize

= all same size

h move to win ←

j move to win ↓

k move to win ↑

l move to win →

:sp [<filename>]

edit in split window

Cursor Bookmarks

:marks ^ ' o

ma mark local 'a'

'A goto global 'A'

'' prev location

File / Directory

:Explore Or :e .

:set browsedir=..

one of buffer last