

Introdução ao Sistema Gnu/Linux

Bem Vindos Calouros 2010

:D



Agenda:

- História do Gnu/Linux
- Licença GPL
- “Distro” o que é isso?
- Motivação - Linux, Ser ou Não Ser?
- Instalação
- Alguns Conceitos - Survival Kit
- Referências - Pra onde eu corro?

História do Gnu/Linux



Como tudo começou...

Tanenbaum e o Minix

- Criador do Minix
- S.O. para fins acadêmicos
- Código Aberto



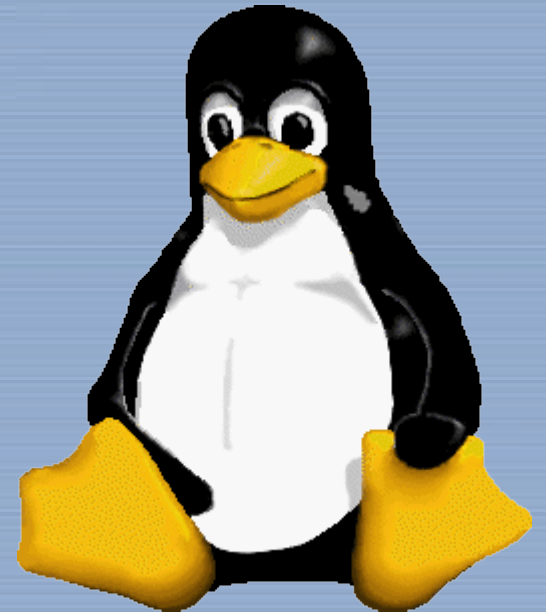
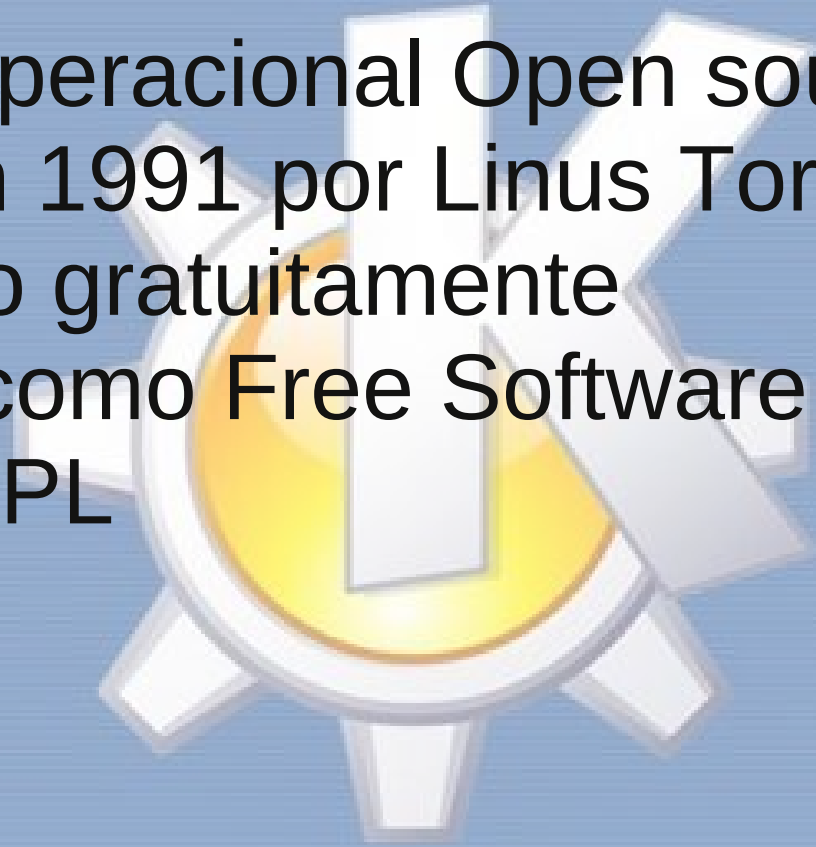
Linus Benedict Torvalds

- Nacionalidade:
Finlandês
- Nascimento:
28 de Dezembro de 1969
- Universidade:
University of Helsinki
- Curso
Ciência da Computação



O que é Linux ?

- Sistema operacional Open source
- Criado em 1991 por Linus Torvalds
- Distribuído gratuitamente
- Liberado como Free Software
- Licença GPL



From: torvalds@klaava.Helsinki.FI (Linus Benedict Torvalds)
Newsgroups: comp.os.minix
Subject: What would you like to see most in minix?
Summary: small poll for my new operating system
Message-ID: <1991Aug25.205708.9541@klaava.Helsinki.FI>
Date: 25 Aug 91 20:57:08 GMT
Organization: University of Helsinki

Hello everybody out there using minix -

I'm doing a (free) operating system (just a hobby, won't be big and professional like gnu) for 386(486) AT clones. This has been brewing since april, and is starting to get ready. I'd like any feedback on things people like/dislike in minix, as my OS resembles it somewhat (same physical layout of the file-system (due to practical reasons) among other things).

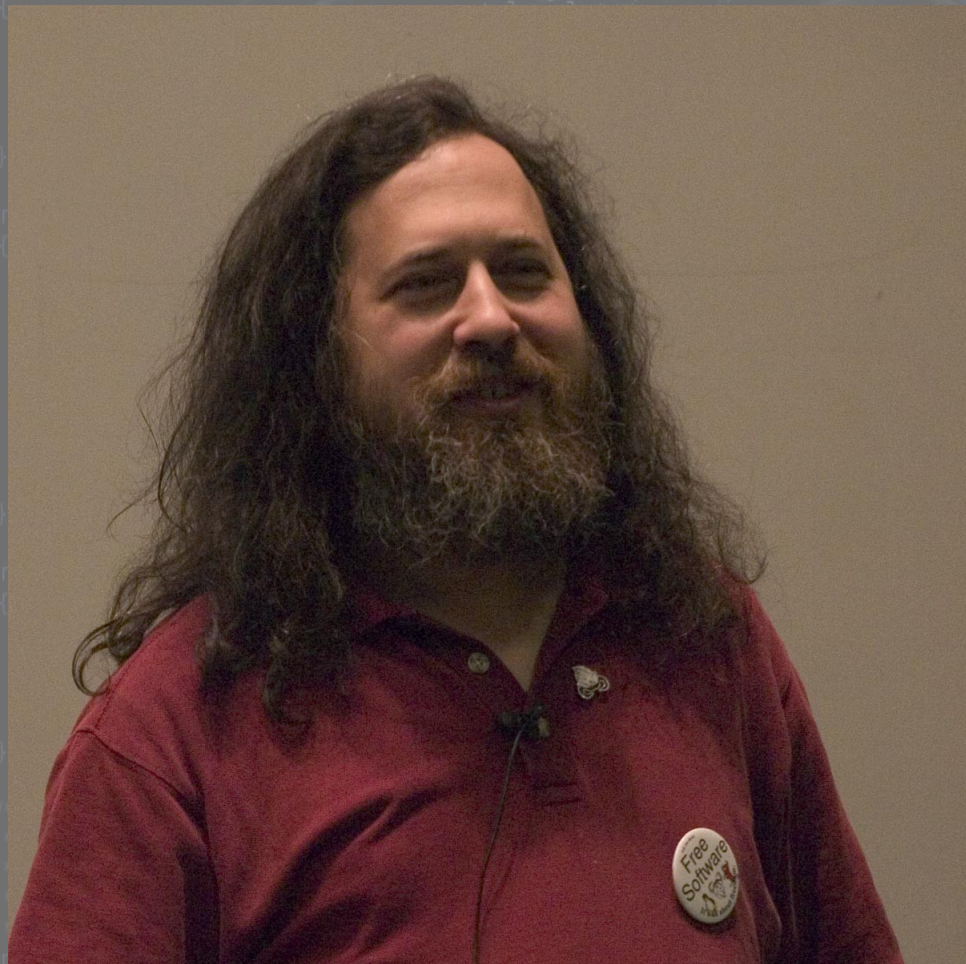
I've currently ported bash(1.08) and gcc(1.40), and things seem to work. This implies that I'll get something practical within a few months, and I'd like to know what features most people would want. Any suggestions are welcome, but I won't promise I'll implement them :-)

Linus (torvalds@kruuna.helsinki.fi)

PS. Yes - it's free of any minix code, and it has a multi-threaded fs. It is NOT portable (uses 386 task switching etc), and it probably never will support anything other than AT-harddisks, as that's all I have :-).

The World is "Open Source"

Richard Stallman e o Projeto GNU



Licença GPL



1. A liberdade de executar o programa, para qualquer propósito (liberdade nº 0)
2. A liberdade de estudar como o programa funciona e adaptá-lo para as suas necessidades (liberdade nº 1). O acesso ao código-fonte é um pré-requisito para esta liberdade.
3. A liberdade de redistribuir cópias de modo que você possa ajudar ao seu próximo (liberdade nº 2).
4. A liberdade de aperfeiçoar o programa, e liberar os seus aperfeiçoamentos, de modo que toda a comunidade se beneficie deles (liberdade nº 3). O acesso ao código-fonte é um pré-requisito para esta liberdade.

Mais informações: <http://www.gnu.org/copyleft/gpl.html>

Distro – O que é isso?



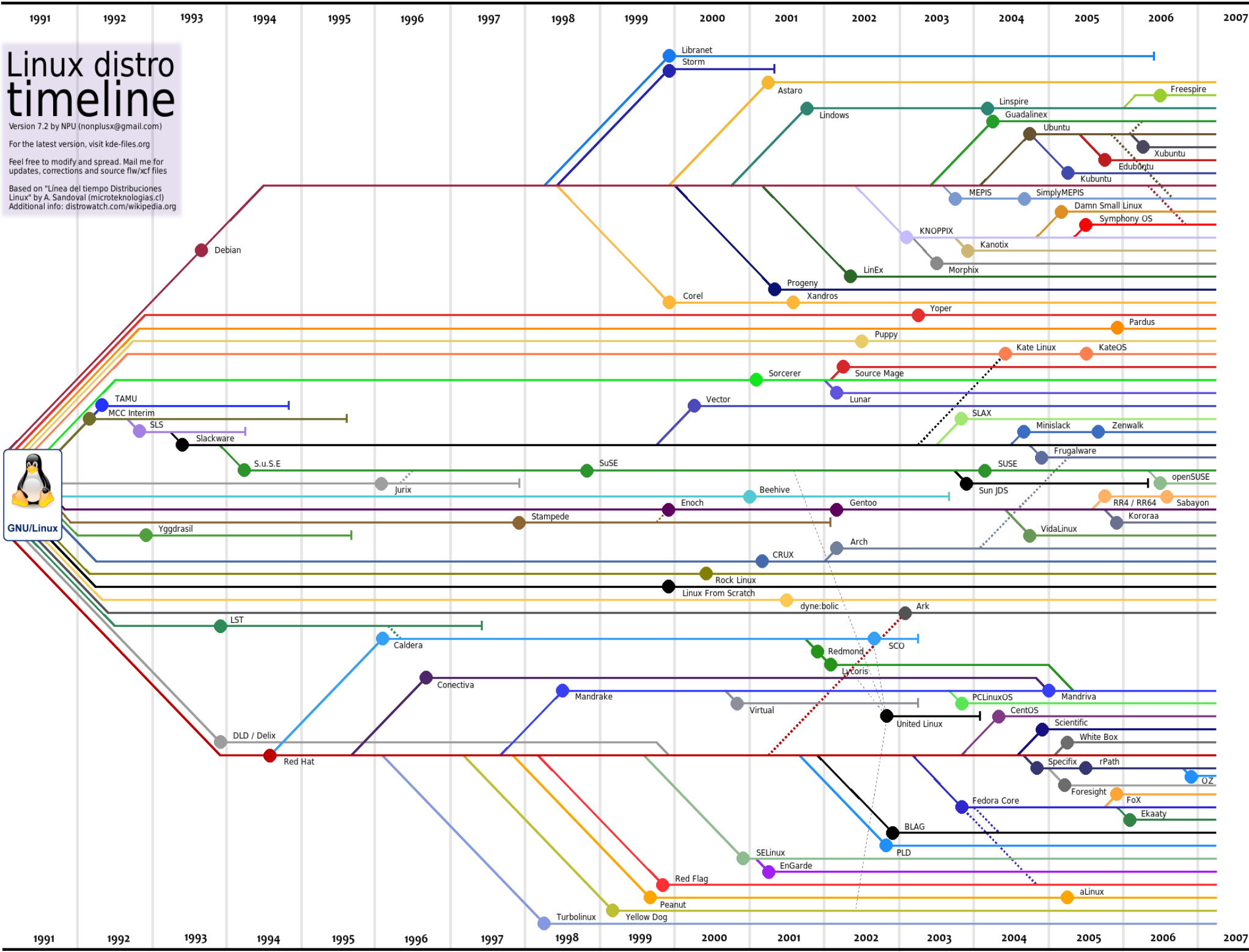
Linux distro timeline

Version 7.2 by NPU (nonplusx@gmail.com)

For the latest version, visit kde-files.org

Feel free to modify and spread. Mail me for updates, corrections and source flw/xcf files

Based on "Linea del tiempo Distribuciones Linux" by A. Sandoval (microteknologias.cl)
Additional info: distrowatch.com/wikipedia.org



Curso baseado no Ubuntu



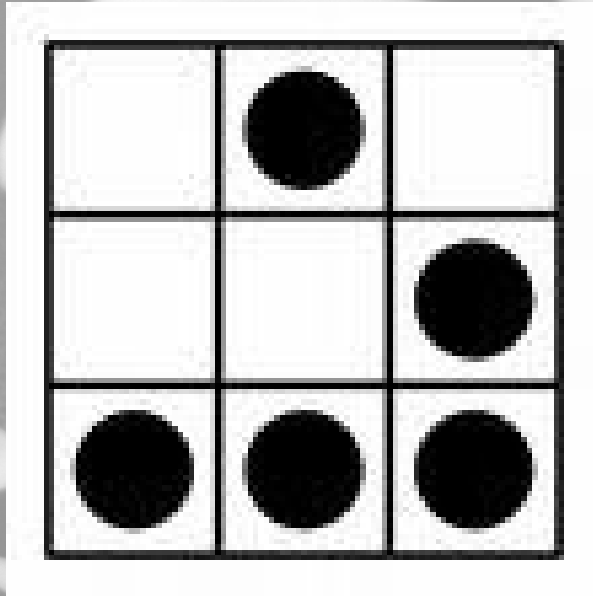
Ubuntu, safe, easy and beautiful.

Motivação - Linux, Ser ou Não Ser?



Linux vs. Windows

Hacking



- Liberdade para mexer no código

Transparência



open source

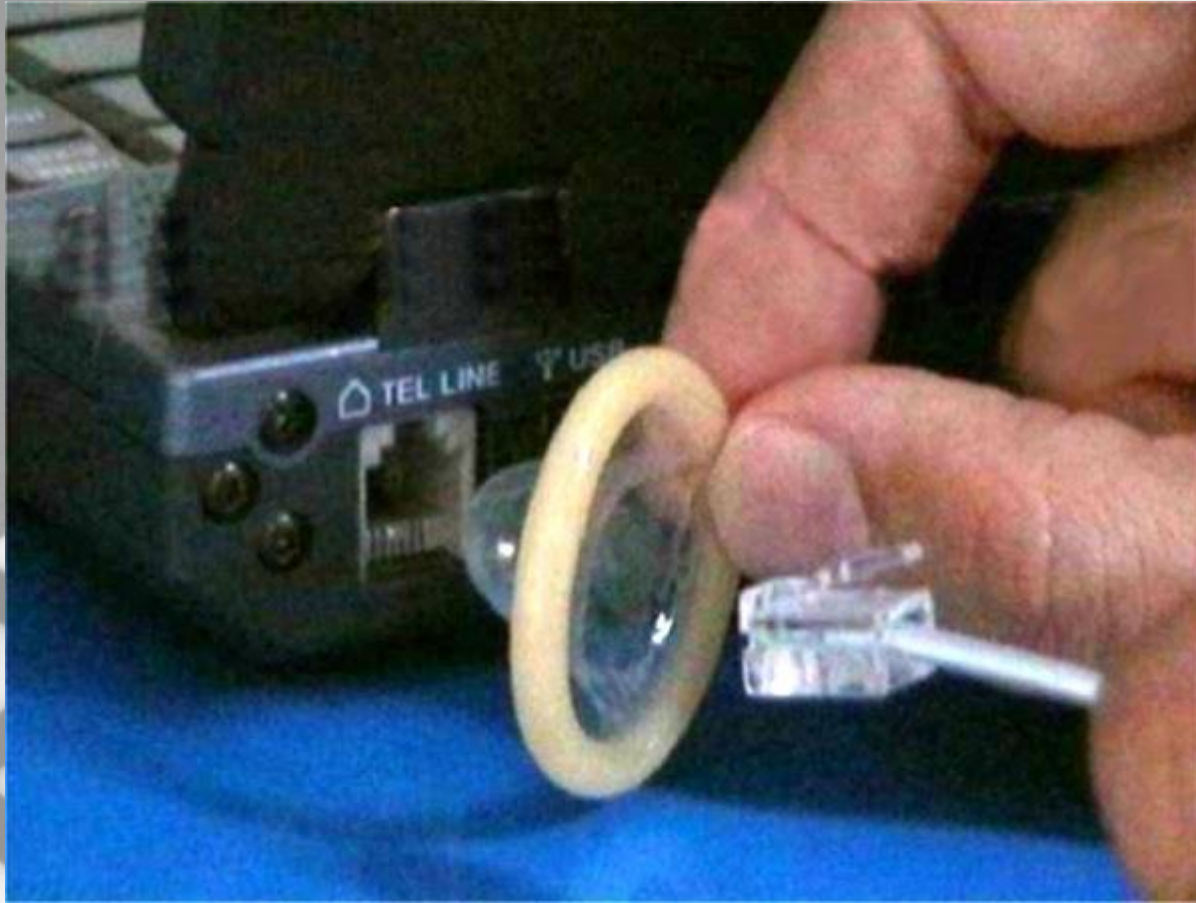
- Você sabe o que ocorre no seu S.O.

Segurança



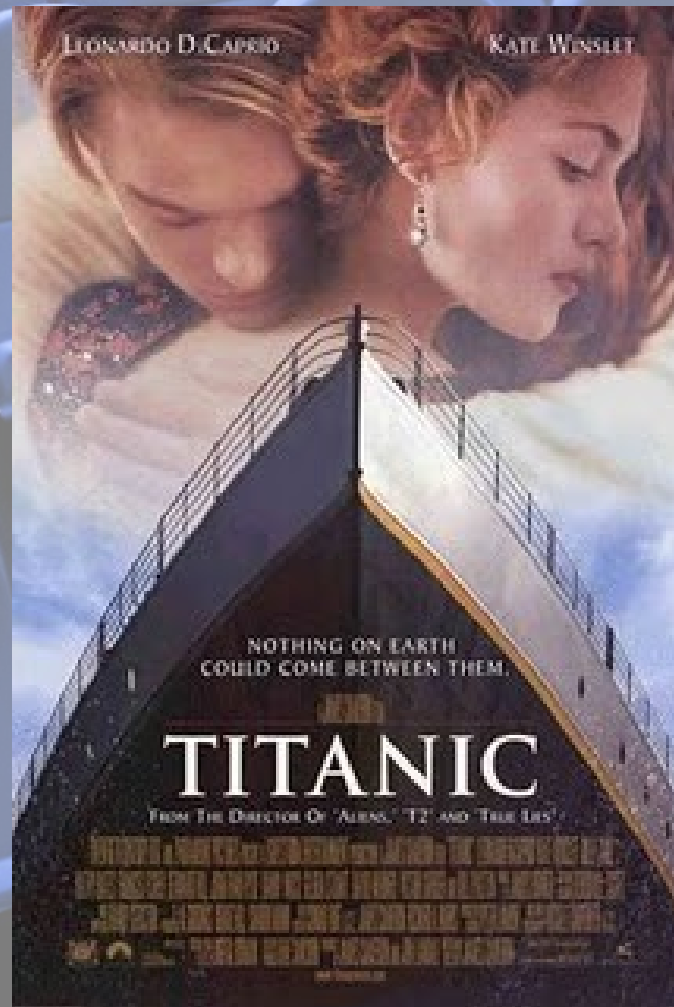
- Políticas de Segurança

Virus



- Chances de contrair virus = quase 0%

Projetos que usaram Linux



Projetos que usaram Linux



Projetos que usaram Linux



Projetos que Usam Linux




Projetos que Usam Linux



- Sony PS3 Cluster

Instalação



Use Ubuntu
To use Ubuntu as a Live CD, put this CD in the CD drive and turn on or restart your computer. To install Ubuntu, run the Live CD and double click on the "Install" icon. The default installation will erase all existing software and data from your computer. If this is not what you want, follow the instructions carefully during installation.
To try Windows versions of some of the programs included in Ubuntu, put the CD in the drive while Windows is running.

The Ubuntu Promise

- Ubuntu will always be free of charge, including enterprise releases and security updates.
- Ubuntu comes with full commercial support from Canonical and hundreds of companies around the world.
- Ubuntu includes the very best open source and accessibility infrastructure.

Pass it on!
This CD can be used to install Ubuntu on desktops and laptops. So install it, enjoy it, and pass it on!



ubuntu

Ubuntu 7.10
for your PC

Legally free to copy, modify and redistribute. Ubuntu and the Ubuntu logo are registered trademarks of Canonical Ltd. www.ubuntu.com



ubuntu
linux for human beings



ubuntu

Ubuntu 7.10 for your PC

Alguns Conceitos - Survival Kit

- Usuário normal \$
- Root : #
- Back Space ("~~--") apagar caracter à esquerda.~~
- Del: apagar o caracter acima do cursor.
- CTRL+A mover o cursor para o inicio da linha.
- CTRL+E mover o cursor para o fim da linha.
- CTRL+U apagar o que estiver à esquerda do cursor.
- CTRL+K apagar o que estiver à direita do cursor.
- CTRL+Y para colocar o texto que foi apagado.
- CTRL+L limpar a tela (clear).

```
FILE COMMANDS
ls - directory listing
ls -al - formatted listing with hidden files
cd dir - change directory to dir
cd - change to home
pwd - show current directory
cp file1 file2 - copy file1 to file2
cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2
if file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
tail -f file - output the contents of file as it
grows, starting with the last 10 lines

SEARCHING
grep pattern file... - search for pattern in the
output of command
locate file - find all instances of file

PROCESS MANAGEMENT
ps - display your currently active processes
top - display all running processes
kill pid - kill process id pid
killall proc - kill all processes named proc
fg - brings the most recent job to foreground
fg n - brings job n to the foreground

SHORTCUTS
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
Ctrl+Q - resume foreground or bg in the background
Ctrl+D - end of current session, similar to exit
Ctrl+W - erase one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session

SYSTEM INFO
date - show the current date and time
cal - show this month's calendar
uptime - show current uptime
w - display who is online
whoami - who you are logged in as
finger user - display information about user
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default

COMPRESSION
tar cf file.tar files - create a tar named
file.tar containing files
tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression
tar xzf file.tar.gz - extract a tar using Gzip
compression
tar cjf file.tar.bz2 - create a tar with Bzip2
compression
tar xjf file.tar.bz2 - extract a tar using Bzip2
compression
gzip file - compresses file and renames it to
file.gz
gzip -d file.gz - decompresses file.gz back to
file

NETWORK
ping host - ping host and output results
whois domain - get whois information for domain
dig domain - get DNS information for domain
dig -x host - reverse lookup host
wget file - download file
wget -c file - continue a stopped download

INSTALLATION
Install from source:
./configure
make
make install
dpkg - install a package (Debian)
rpm -ivh pkg.rpm - install a package (RPM)

PERMISSIONS
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)

Examples:
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```


FILE COMMANDS

```
ls - directory listing
ls -al - formatted listing with hidden files
cd dir - change directory to dir
cd - change to home
pwd - show current directory
mkdir dir - create directory dir
rm file - remove file
rm -r dir - force remove directory dir
cp file1 file2 - copy file1 to file2
cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2
if file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
tail -f file - output the contents of file as it
grows, starting with the last 10 lines
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir
grep -r pattern dir search for pattern in the
entire tree rooted at dir
grep -n pattern dir search for pattern in the
entire tree rooted at dir; print line
numbers and instances of file
```

SYSTEM INFO

```
date - show the current date and time
cal - show this month's calendar
uptime - show current uptime
w - display who is online
whoami - who you are logged in as
finger user - display information about user
uname -a - show kernel information
cat /proc/cpuinfo - cpu information
cat /proc/meminfo - memory information
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default
```

COMPRESSION

```
tar cf file.tar files - create a tar named
file.tar containing files
tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression
tar xzf file.tar.gz - extract a tar using Gzip
tar cjf file.tar.bz2 - create a tar with Bzip2
compression
tar xjf file.tar.bz2 - extract a tar using Bzip2
gzip file - compresses file and renames it to
file.gz
gzip -d file.gz - decompresses file.gz back to
file
```

NETWORK

```
ping host - ping host and output results
whois domain - get whois information for domain
dig domain - get DNS information for domain
dig -x host - reverse lookup host
wget file - download file
wget -c file - continue a stopped download
```

INSTALLATION

```
Install from source:
./configure
make
make install
dpkg -i pkg.deb - install a package (Debian)
rpm -Uvh pkg.rpm - install a package (RPM)
```

FILE PERMISSIONS

```
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
```

Examples:

```
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

PROCESS MANAGEMENT

```
ps - display your currently active processes
top - display all running processes
kill pid - kill process id pid
killall proc - kill all processes named proc
(use with extreme caution)
bg - lists stopped or background jobs; resume a
stopped job in the background
fg - brings the most recent job to foreground
fg n - brings job n to the foreground
```

SHORTCUTS

```
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

Comandos

- man - Mostra help do comando
help [opções] [comando]
- man -a mkdir

Cli

commands

FILE COMMANDS

```
ls - directory listing
ls -al - formatted listing with hidden files
cd dir - change directory to dir
cd - change to home
pwd - show current directory
mkdir dir - create directory dir
rm file - remove file
rm -r dir - remove directory dir
cp file1 file2 - copy file1 to file2
cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2
if file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
tail -f file - output the contents of file as it
grows, starting with the last 10 lines
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir
grep -l pattern - search for pattern in the
command
find file - find all instances of file
```

SYSTEM INFO

```
date - show the current date and time
cal - show this month's calendar
uptime - show current uptime
w - display who is online
whoami - who you are logged in as
finger user - display information about user
uname -a - show kernel information
cat /proc/cpuinfo - cpu information
cat /proc/meminfo - memory information
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default
```

COMPRESSION

```
tar cf file.tar files - create a tar named
file.tar containing files
tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression
tar xzf file.tar.gz - extract a tar using Gzip
tar cjf file.tar.bz2 - create a tar with Bzip2
compression
tar xjf file.tar.bz2 - extract a tar using Bzip2
gzip file - compresses file and renames it to
file.gz
gzip -d file.gz - decompresses file.gz back to
file
```

NETWORK

```
ping host - ping host and output results
whois domain - get whois information for domain
dig domain - get DNS information for domain
dig -x host - reverse lookup host
wget file - download file
wget -c file - continue a stopped download
```

INSTALLATION

```
Install from source:
./configure
make
make install
dpkg -i pkg.deb - install a package (Debian)
rpm -Uvh pkg.rpm - install a package (RPM)
```

FILE PERMISSIONS

```
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
```

Examples:

```
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

PROCESS MANAGEMENT

```
ps - display your currently active processes
top - display all running processes
kill pid - kill process id pid
killall proc - kill all processes named proc
(use with extreme caution)
bg - lists stopped or background jobs; resume a
stopped job in the background
fg - brings the most recent job to foreground
fg n - brings job n to the foreground
```

SHORTCUTS

```
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

Comandos

- ls - Mostra arquivos de diretórios
ls [opções] [caminho]
- ls -lha

Cli

commands

```
FILE COMMANDS
ls - directory listing
ls -al - formatted listing with hidden files
cd dir - change directory to dir
cd - change to home
pwd - show current directory
mkdir dir - create directory dir
rm file - remove file
rm -r dir - force remove directory dir
cp file1 file2 - copy file1 to file2
cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2;
if file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
tail -f file - output the contents of file as it
grows, starting with the last 10 lines
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir
command | grep pattern - search for pattern in the
output of command
locate file - find all instances of file
```

```
SYSTEM INFO
date - show the current date and time
cal - show this month's calendar
uptime - show current uptime
w - display who is online
whoami - who you are logged in as
finger user - display information about user
uname -a - show kernel information
cat /proc/cpuinfo - cpu information
cat /proc/meminfo - memory information
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default
```

```
COMPRESSION
tar cf file.tar files - create a tar named
file.tar containing files
tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression
tar xzf file.tar.gz - extract a tar using Gzip
tar cjf file.tar.bz2 - create a tar with Bzip2
compression
tar xjf file.tar.bz2 - extract a tar using Bzip2
gzip file - compresses file and renames it to
file.gz
gzip -d file.gz - decompresses file.gz back to
file
```

```
NETWORK
ping host - ping host and output results
whois domain - get whois information for domain
dig domain - get DNS information for domain
dig -x host - reverse lookup host
wget file - download file
wget -c file - continue a stopped download
```

```
INSTALLATION
Install from source:
./configure
make
make install
dpkg -i pkg.deb - install a package (Debian)
rpm -Uvh pkg.rpm - install a package (RPM)
```

```
FILE PERMISSIONS
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
```

```
Examples:
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

```
PROCESS MANAGEMENT
ps - display your currently active processes
top - display all running processes
kill pid - kill process id pid
killall proc - kill all processes named proc
(use with extreme caution)
bg - lists stopped or background jobs; resume a
stopped job in the background
fg - brings the most recent job to foreground
fg n - brings job n to the foreground
```

```
SHORTCUTS
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

Comandos

- cd - Para mudar de diretório

cd [caminho]

- cd .
- cd ..
- cd /
- cd ~



FILE COMMANDS

- ls - directory listing
- ls -al - formatted listing with hidden files
- cd dir - change directory to dir
- cd - change to home
- pwd - show current directory
- mkdir dir - create directory dir
- rm file - remove file
- rm -r dir - remove directory dir
- rm -rf dir - force remove directory dir *
- cp file1 file2 - copy file1 to file2
- cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it doesn't exist
- mv file1 file2 - rename or move file1 to file2; if file2 is an existing directory, moves file1 into directory file2
- ln -s file link - create symbolic link link to file
- touch file - create or update file
- cat > file - places standard input into file
- more file - output the contents of file
- head file - output the first 10 lines of file
- tail file - output the last 10 lines of file
- tail -f file - output the contents of file as it grows, starting with the last 10 lines
- grep pattern files - search for pattern in files
- grep -r pattern dir - search recursively for pattern in dir
- command | grep pattern - search for pattern in the output of command
- locate file - find all instances of file

SYSTEM INFO

- date - show the current date and time
- cal - show this month's calendar
- uptime - show current uptime
- w - display who is online
- whoami - who you are logged in as
- finger user - display information about user
- uname -a - show kernel information
- cat /proc/cpuinfo - cpu information
- cat /proc/meminfo - memory information
- man command - show the manual for command
- df - show disk usage
- du - show directory space usage
- free - show memory and swap usage
- whereis app - show possible locations of app
- which app - show which app will be run by default

COMPRESSION

- tar cf file.tar files - create a tar named file.tar containing files
- tar xf file.tar - extract the files from file.tar
- tar czf file.tar.gz files - create a tar with Gzip compression
- tar xzf file.tar.gz - extract a tar using Gzip
- tar cjf file.tar.bz2 files - create a tar with Bzip2 compression
- tar xjf file.tar.bz2 - extract a tar using Bzip2
- gzip file - compresses file and renames it to file.gz
- gzip -d file.gz - decompresses file.gz back to file

NETWORK

- ping host - ping host and output results
- whois domain - get whois information for domain
- dig domain - get DNS information for domain
- dig -x host - reverse lookup host
- wget file - download file
- wget -c file - continue a stopped download

INSTALLATION

- Install from source:
 - ./configure
 - make
 - make install
- dpkg -i pkg.deb - install a package (Debian)
- rpm -Uvh pkg.rpm - install a package (RPM)

FILE PERMISSIONS

- chmod octal file - change the permissions of file to octal, which can be found separately for user, group, and world by adding:
 - 4 - read (r)
 - 2 - write (w)
 - 1 - execute (x)

Examples:

```
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

SHORTCUTS

- Ctrl+C - halts the current command
- Ctrl+Z - stops the current command, resume with fg in the foreground or bg in the background
- Ctrl+D - log out of current session, similar to exit
- Ctrl+W - erases one word in the current line
- Ctrl+U - erases the whole line
- Ctrl+R - type to bring up a recent command
- !! - repeats the last command
- exit - log out of current session

PROCESS MANAGEMENT

- ps - display your currently active processes
- top - display all running processes
- kill pid - kill process id pid
- killall proc - kill all processes named proc (use with extreme caution)
- bg - lists stopped or background jobs; resume a stopped job in the background
- fg - brings the most recent job to foreground
- fg n - brings job n to the foreground

Cli commands

- pwd - Mostra o nome e caminho do diretório atual.

pwd

Comandos

- mkdir - Cria um diretório no sistema.
mkdir [opções] [caminho]
- mkdir -verbose /home/cbcc/minhaPasta

FILE COMMANDS

```
ls - directory listing
ls -al - formatted listing with hidden files
cd dir - change directory to dir
cd - change to home
pwd - show current directory
mkdir dir - create directory dir
rm file - remove file
rm -r dir - remove directory dir
rm -rf dir - force remove directory dir *
cp file1 file2 - copy file1 to file2
cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2
if file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
tail -f file - output the contents of file as it
grows, starting with the last 10 lines
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir
grep -r pattern dir search for pattern in the
directory dir and all subdirectories, listing all
instances of file
```

SYSTEM INFO

```
date - show the current date and time
cal - show this month's calendar
uptime - show current uptime
w - display who is online
whoami - who you are logged in as
finger user - display information about user
uname -a - show kernel information
cat /proc/cpuinfo - cpu information
cat /proc/meminfo - memory information
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default
```

COMPRESSION

```
tar cf file.tar files - create a tar named
file.tar containing files
tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression
tar xzf file.tar.gz - extract a tar using Gzip
tar cjf file.tar.bz2 - create a tar with Bzip2
compression
tar xjf file.tar.bz2 - extract a tar using Bzip2
gzip file - compresses file and renames it to
file.gz
gzip -d file.gz - decompresses file.gz back to
file
```

NETWORK

```
ping host - ping host and output results
nslookup domain - get whois information for domain
dig domain - get DNS information for domain
dig -x host - reverse lookup host
wget file - download file
wget -c file - continue a stopped download
```

INSTALLATION

```
Install from source:
./configure
make
make install
dpkg -i pkg.deb - install a package (Debian)
rpm -Uvh pkg.rpm - install a package (RPM)
```

FILE PERMISSIONS

```
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
```

Examples:

```
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

PROCESS MANAGEMENT

```
ps - display your currently active processes
top - display all running processes
kill pid - kill process id pid
killall proc - kill all processes named proc
(use with extreme caution)
bg - lists stopped or background jobs; resume a
stopped job in the background
fg - brings the most recent job to foreground
fg n - brings job n to the foreground
```

SHORTCUTS

```
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

cli
commands

FILE COMMANDS

```
ls - directory listing
ls -al - formatted listing with hidden files
cd dir - change directory to dir
cd - change to home
pwd - show current directory
mkdir dir - create directory dir
rm file - remove file
rm -d dir - remove directory dir
rm -rf dir - force remove directory dir *
cp file1 file2 - copy file1 to file2
cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2
if file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
tail -f file - output the contents of file as it
grows, starting with the last 10 lines
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir
grep -r pattern dir - search for pattern in the
entire tree rooted at dir; find all instances of file
```

SYSTEM INFO

```
date - show the current date and time
cal - show this month's calendar
uptime - show current uptime
w - display who is online
whoami - who you are logged in as
finger user - display information about user
uname -a - show kernel information
cat /proc/cpuinfo - cpu information
cat /proc/meminfo - memory information
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default
```

COMPRESSION

```
tar cf file.tar files - create a tar named
file.tar containing files
tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression
tar xzf file.tar.gz - extract a tar using Gzip
tar cf file.tar.bz2 - create a tar with Bzip2
compression
tar xjf file.tar.bz2 - extract a tar using Bzip2
gzip file - compresses file and renames it to
file.gz
gzip -d file.gz - decompresses file.gz back to
file
```

NETWORK

```
ping host - ping host and output results
whois domain - get whois information for domain
dig domain - get DNS information for domain
dig -x host - reverse lookup host
wget file - download file
wget -c file - continue a stopped download
```

INSTALLATION

```
Install from source:
./configure
make
make install
dpkg -i pkg.deb - install a package (Debian)
rpm -Uvh pkg.rpm - install a package (RPM)
```

FILE PERMISSIONS

```
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
```

Examples:

```
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

PROCESS MANAGEMENT

```
ps - display your currently active processes
top - display all running processes
kill pid - kill process id pid
killall proc - kill all processes named proc
(use with extreme caution)
bg - lists stopped or background jobs; resume a
stopped job in the background
fg - brings the most recent job to foreground
fg n - brings job n to the foreground
```

SHORTCUTS

```
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

Comandos

- rmdir - Remove um diretório do sistema
rmdir [caminho/diretorio]

Cli

commands

FILE COMMANDS

```
ls - directory listing
ls -al - formatted listing with hidden files
cd dir - change directory to dir
cd - change to home
pwd - show current directory
mkdir dir - create directory dir
rm file - remove file
rm -d dir - remove directory dir
rm -rf dir - force remove directory dir *
cp file1 file2 - copy file1 to file2
cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2
if file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
tail -f file - output the contents of file as it
grows, starting with the last 10 lines
```

SEARCH

```
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir
command | grep pattern - search for pattern in the
output of command
locate file - find all instances of file
```

PROCESS MANAGEMENT

```
ps - display your currently active processes
top - display all running processes
kill pid - kill process id pid
killall proc - kill all processes named proc
(use with extreme caution)
bg - lists stopped or background jobs; resume a
stopped job in the background
fg - brings the most recent job to foreground
fg n - brings job n to the foreground
```

SHORTCUTS

```
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

SYSTEM INFO

```
date - show the current date and time
cal - show this month's calendar
uptime - show current uptime
w - display who is online
whoami - who you are logged in as
finger user - display information about user
uname -a - show kernel information
cat /proc/cpuinfo - cpu information
cat /proc/meminfo - memory information
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default
```

COMPRESSION

```
tar cf file.tar files - create a tar named
file.tar containing files
tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression
tar xzf file.tar.gz - extract files with Bzip2
compression
tar kjf file.tar.bz2 - extract a tar using Bzip2
gzip file - compresses file and renames it to
file.gz
gzip -d file.gz - decompresses file.gz back to
file
```

NETWORK

```
ping host - ping host and output results
whois domain - get whois information for domain
dig domain - get DNS information for domain
dig -x host - reverse lookup host
wget file - download file
wget -c file - continue a stopped download
```

INSTALLATION

```
Install from source:
./configure
make
make install
dpkg -i pkg.deb - install a package (Debian)
rpm -Uvh pkg.rpm - install a package (RPM)
```

FILE PERMISSIONS

```
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
```

Examples:

```
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

Comandos

- cat - Mostra o conteúdo de um arquivo binário ou texto.

cat [opções] [caminho/diretorio]

- cat -n /etc/resolv.conf

```
FILE COMMANDS
ls - directory listing
ls -al - formatted listing with hidden files
cd dir - change directory to dir
cd - change to home
pwd - show current directory
mkdir dir - create directory dir
rm file - remove file
rm -r dir - remove directory dir
rm -rf dir - force remove directory dir
cp file1 file2 - copy file1 to file2
cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2;
if file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
tail -f file - output the contents of file as it
grows, starting with the last 10 lines
```

```
SYSTEM INFO
date - show the current date and time
cal - show this month's calendar
uptime - show current uptime
w - display who is online
whoami - who you are logged in as
finger user - display information about user
uname -a - show kernel information
cat /proc/cpuinfo - cpu information
cat /proc/meminfo - memory information
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default
```

```
SEARCH
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir
grep -r pattern dir - search recursively for
pattern in dir
```

```
COMPRESSION
tar cf file.tar files - create a tar named
file.tar containing files
tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression
tar xzf file.tar.gz - extract a tar using Gzip
tar cjf file.tar.bz2 - create a tar with Bzip2
compression
tar xjf file.tar.bz2 - extract a tar using Bzip2
gzip file - compresses file and renames it to
file.gz
gzip -d file.gz - decompresses file.gz back to
file
```

```
NETWORK
ping host - ping host and output results
whois domain - get whois information for domain
dig domain - get DNS information for domain
dig -x host - reverse lookup host
wget file - download file
wget -c file - continue a stopped download
```

```
INSTALLATION
Install from source:
./configure
make
make install
dpkg -i pkg.deb - install a package (Debian)
rpm -Uvh pkg.rpm - install a package (RPM)
```

```
FILE PERMISSIONS
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
```

```
Examples:
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

```
PROCESS MANAGEMENT
ps - display your currently active processes
top - display all running processes
kill pid - kill process id pid
killall proc - kill all processes named proc
(use with extreme caution)
bg - lists stopped or background jobs; resume a
stopped job in the background
fg - brings the most recent job to foreground
fg n - brings job n to the foreground
```

```
SHORTCUTS
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

Comandos

- rm - Remove um arquivo.
- rm [opções] [caminho/diretorio]
- rm -rfv /home/cbcc/minhaPasta

CLI commands

FILE COMMANDS

```
ls - directory listing
ls -al - formatted listing with hidden files
cd dir - change directory to dir
cd - change to home
pwd - show current directory
mkdir dir - create directory dir
rm file - remove file
rm -r dir - remove directory dir
cp file1 file2 - copy file1 to file2
cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2; if
file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
tail -f file - output the contents of file as it
grows, starting with the last 10 lines
```

```
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir
grep -r pattern dir --exclude=files - search for
pattern in the
directory dir, excluding files named files
```

SYSTEM INFO

```
date - show the current date and time
cal - show this month's calendar
uptime - show current uptime
w - display who is online
whoami - who you are logged in as
finger user - display information about user
uname -a - show kernel information
cat /proc/cpuinfo - cpu information
cat /proc/meminfo - memory information
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default
```

COMPRESSION

```
tar cf file.tar files - create a tar named
file.tar containing files
tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression
tar xzf file.tar.gz - extract a tar using Gzip
tar cjf file.tar.bz2 - create a tar with Bzip2
compression
tar xjf file.tar.bz2 - extract a tar using Bzip2
gzip file - compresses file and renames it to
file.gz
gzip -d file.gz - decompresses file.gz back to
file
```

NETWORK

```
ping host - ping host and output results
whois domain - get whois information for domain
dig domain - get DNS information for domain
dig -x host - reverse lookup host
wget file - download file
wget -c file - continue a stopped download
```

INSTALLATION

```
Install from source:
./configure
make
make install

dpkg -i pkg.deb - install a package (Debian)
rpm -Uvh pkg.rpm - install a package (RPM)
```

FILE PERMISSIONS

```
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
```

Examples:

```
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

PROCESS MANAGEMENT

```
ps - display your currently active processes
top - display all running processes
kill pid - kill process id pid
killall proc - kill all processes named proc
(use with extreme caution)
bg - lists stopped or background jobs; resume a
stopped job in the background
fg - brings the most recent job to foreground
fg n - brings job n to the foreground
```

SHORTCUTS

```
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

Comandos

- cp - Cópia arquivos.

cp [opções] [origem] [destino]

- cp -iRv ./origem ./destino

Cli

commands


```
FILE COMMANDS
ls - directory listing
ls -al - formatted listing with hidden files
cd dir - change directory to dir
cd - change to home
pwd - show current directory
mkdir dir - create directory
rm file - remove file
rmdir dir - remove directory
rm -rf dir - force remove directory dir *
cp file1 file2 - copy file1 to file2
cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2
if file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
tail -f file - output the contents of file as it
grows, starting with the last 10 lines
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir
grep -o pattern - search for pattern in the
output of command
locate file - find all instances of file
```

```
SYSTEM INFO
date - show the current date and time
cal - show this month's calendar
uptime - show current uptime
w - display who is online
whoami - who you are logged in as
finger user - display information about user
uname -a - show kernel information
cat /proc/cpuinfo - cpu information
cat /proc/meminfo - memory information
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default
```

```
PROCESS MANAGEMENT
ps - display your currently active processes
top - display all running processes
kill pid - kill process id pid
killall proc - kill all processes named proc
(use with extreme caution)
bg - lists stopped or background jobs; resume a
stopped job in the background
fg - brings the most recent job to foreground
fg n - brings job n to the foreground
```

```
COMPRESSION
tar cf file.tar files - create a tar named
file.tar containing files
tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression
tar xzf file.tar.gz - extract a tar using Gzip
compression
tar kxf file.tar.bz2 - extract a tar with Bzip2
tar xkf file.tar.bz2 - extract a tar using Bzip2
gzip file - compresses file and renames it to
file.gz
gzip -d file.gz - decompresses file.gz back to
file
```

```
NETWORK
ping host - ping host
nslookup host - get DNS information for host
dig domain - get DNS information for domain
dig -x host - reverse lookup host
wget file - download file
wget -c file - continue a stopped download
```

```
SHORTCUTS
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

```
INSTALLATION
Install from source:
./configure
make
make install
dpkg -i pkg.deb - install a package (Debian)
rpm -Uvh pkg.rpm - install a package (RPM)
```

```
FILE PERMISSIONS
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
Examples:
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

Comandos

- **chmod** – Modifica permissões de acesso a arquivos e diretórios

chmod [opções] [permissões][diretório/arquivo]

- [opções] -Rv
- [permissões] ugoa+ -=rwx

```
FILE COMMANDS
ls - directory listing
ls -al - formatted listing with hidden files
cd dir - change directory to dir
cd - change to home
pwd - show current directory
mkdir dir - create directory dir
rm file - remove file
rmdir dir - remove directory dir
rm -rf dir - force remove directory dir *
cp file1 file2 - copy file1 to file2
cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2
if file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
tail -f file - output the contents of file as it
grows, starting with the last 10 lines
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir
grep -r pattern dir - search recursively for
pattern in dir
```

```
SYSTEM INFO
date - show the current date and time
cal - show this month's calendar
uptime - show current uptime
w - display who is online
whoami - who you are logged in as
finger user - display information about user
uname -a - show kernel information
cat /proc/cpuinfo - cpu information
cat /proc/meminfo - memory information
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default
```

```
SEARCHING
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir
grep -r pattern dir - search recursively for
pattern in dir
```

```
COMPRESSION
tar cf file.tar files - create a tar named
file.tar containing files
tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression
tar xzf file.tar.gz - extract a tar with Bzip2
tar xjf file.tar.bz2 - extract a tar using Bzip2
gzip file - compresses file and renames it to
file.gz
gunzip file.gz - decompresses file.gz back to
file
```

```
PROCESS MANAGEMENT
ps - display your currently active processes
top - display all running processes
kill pid - kill process id pid
killall proc - kill all processes named proc
(use with extreme caution)
bg - lists stopped or background jobs; resume a
stopped job in the background
fg - brings the most recent job to foreground
fg n - brings job n to the foreground
```

```
NETWORK
ping host - ping host and output results
whois domain - get whois information for domain
dig domain - get DNS information for domain
dig -x host - reverse lookup host
wget file - download file
wget -c file - continue a stopped download
Install from source:
./configure
make
make install
dpkg -i pkg.deb - install a package (Debian)
rpm -Uvh pkg.rpm - install a package (RPM)
```

```
SHORTCUTS
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

```
FILE PERMISSIONS
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
Examples:
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

```
SHORTCUTS
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

```
FILE PERMISSIONS
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
Examples:
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

```
SHORTCUTS
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

```
FILE PERMISSIONS
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
Examples:
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

Cli Commands

- `chgrp` - Muda o grupo de um arquivo/diretório.
`chgrp [opções] [grupo] [arquivo/diretório]`
 - [opções] -Rv
 - [grupo] grupos presentes no `/etc/group`

```
FILE COMMANDS
ls - directory listing
ls -al - formatted listing with hidden files
cd dir - change directory to dir
cd - change to home
pwd - show current directory
mkdir dir - create directory dir
rm file - remove file
rm -d dir - remove directory dir
rm -rf dir - force remove directory dir *
cp file1 file2 - copy file1 to file2
cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2
if file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
tail -f file - output the contents of file as it
grows, starting with the last 10 lines
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir
grep -o pattern files - search for pattern in files
and output only the parts of the lines that
match the pattern
```

```
SYSTEM INFO
date - show the current date and time
cal - show this month's calendar
uptime - show current uptime
w - display who is online
whoami - who you are logged in as
finger user - display information about user
uname -a - show kernel information
cat /proc/cpuinfo - cpu information
cat /proc/meminfo - memory information
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default
```

```
COMPRESSION
tar cf file.tar files - create a tar named
file.tar containing files
tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression
tar xzf file.tar.gz - extract a tar using Gzip
tar xjf file.tar.bz2 - extract a tar with Bzip2
gzip file - compresses file and renames it to
file.gz
gzip -d file.gz - decompresses file.gz back to
file
```

```
NETWORK
ping host - ping host and output results
whois domain - get whois information for domain
dig domain - get DNS information for domain
dig -x host - reverse lookup host
wget file - download file
wget -c file - continue a stopped download
```

```
PROCESS MANAGEMENT
ps - display your currently active processes
top - display all running processes
kill pid - kill process id pid
killall proc - kill all processes named proc
(use with extreme caution)
bg - lists stopped or background jobs; resume a
stopped job in the background
fg - brings the most recent job to foreground
fg n - brings job n to the foreground
```

```
INSTALLATION
Install from source:
./configure
make
make install
dpkg -i pkg.deb - install a package (Debian)
rpm -Uvh pkg.rpm - install a package (RPM)
```

```
SHORTCUTS
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

```
FILE PERMISSIONS
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
Examples:
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

Cli

Commands

- Chown - Muda dono de um arquivo/diretório.
chown [opções] [dono.grupo] [diretório/arquivo]
- [opções] -Rv
- [grupo] usuários presentes no /etc/passwd

Comandos

- top - Mostra os programas em execução ativos, parados, tempo usado na CPU, detalhes sobre o uso da memória RAM, Swap, disponibilidade para execução de programas no sistema, etc.

FILE COMMANDS

```
ls - directory listing
ls -al - formatted listing with hidden files
cd dir - change directory to dir
cd - change to home
pwd - show current directory
mkdir dir - create directory
rm file - remove file
rm -d dir - remove directory
rm -rf dir - force remove directory dir *
cp file1 file2 - copy file1 to file2
cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2
if file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
tail -f file - output the contents of file as it
grows, starting with the last 10 lines
```

SEARCH

```
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively
grep -n pattern files - search for pattern, the
output or command
locate file - find all instances of file
```

PROCESS MANAGEMENT

```
ps - display your currently active processes
top - display all running processes
kill pid - kill process id pid
killall proc - kill all processes named proc
(use with extreme caution)
bg - lists stopped or background jobs; resume a
stopped job in the background
fg - brings the most recent job to foreground
fg n - brings job n to the foreground
```

SHORTCUTS

```
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

SYSTEM INFO

```
date - show the current date and time
cal - show this month's calendar
uptime - show current uptime
w - display who is online
whoami - who you are logged in as
finger user - display information about user
uname -a - show kernel information
cat /proc/cpuinfo - cpu information
cat /proc/meminfo - memory information
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default
```

COMPRESSION

```
tar cf file.tar files - create a tar named
file.tar containing files
tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression
tar xzf file.tar.gz - extract a tar using Gzip2
compression
tar kjf file.tar.bz2 - extract a tar using Bzip2
gzip file - compresses file and renames it to
file.gz
gunzip file.gz - decompresses file and links to
original file
ping host - ping host and output results
whois domain - get whois information for domain
dig domain - get DNS information for domain
nslookup domain - look up domain
wget file - download file
wget -c file - continue a stopped download
```

INSTALLATION

```
Install from source:
./configure
make
make install
dpkg -i pkg.deb - install a package (Debian)
rpm -Uvh pkg.rpm - install a package (RPM)
```

FILE PERMISSIONS

```
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
Examples:
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

FILE COMMANDS

```
ls - directory listing
ls -al - formatted listing with hidden files
cd dir - change directory to dir
cd - change to home
pwd - show current directory
mkdir dir - create directory dir
rm file - remove file
rm -r dir - remove directory dir
cp file1 file2 - copy file1 to file2
cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2
if file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
tail -f file - output the contents of file as it
grows, starting with the last 10 lines
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir
command | grep pattern - search for pattern in the
output of command
locate file - find all instances of file
```

SYSTEM INFO

```
date - show the current date and time
cal - show this month's calendar
uptime - show current uptime
w - display who is online
whoami - who you are logged in as
finger user - display information about user
uname -a - show kernel information
cat /proc/cpuinfo - cpu information
cat /proc/meminfo - memory information
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default
```

COMPRESSION

```
tar cf file.tar files - create a tar named
file.tar containing files
tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression
tar xzf file.tar.gz - extract files using Gzip
compression
tar cjf file.tar.bz2 - create a tar using Bzip2
compression
tar xjf file.tar.bz2 - extract a tar using Bzip2
gzip file - compresses file and renames it to
file.gz
gzip -d file.gz - decompresses file.gz back to
file
```

NETWORK

```
ping host - ping host and output results
whois domain - get whois information for domain
dig domain - get DNS information for domain
dig -x host - reverse lookup host
wget file - download file
wget -c file - continue a stopped download
```

INSTALLATION

```
Install from source:
./configure
make
make install
dpkg -i pkg.deb - install a package (Debian)
rpm -Uvh pkg.rpm - install a package (RPM)
```

FILE PERMISSIONS

```
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
```

Examples:

```
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

PROCESS MANAGEMENT

```
ps - display your currently active processes
top - display all running processes
kill pid - kill process id pid
killall proc - kill all processes named proc
(use with extreme caution)
bg - lists stopped or background jobs; resume a
stopped job in the background
fg - brings the most recent job to foreground
fg n - brings job n to the foreground
```

SHORTCUTS

```
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

Comandos

Cli commands

- Date - Permite ver/modificar a Data e Hora do Sistema.

FILE COMMANDS

```
ls - directory listing
ls -al - formatted listing with hidden files
cd dir - change directory to dir
cd - change to home
pwd - show current directory
mkdir dir - create directory dir
rm file - remove file
rm -r dir - remove directory dir
cp file1 file2 - copy file1 to file2
cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2
if file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
tail -f file - output the contents of file as it
grows, starting with the last 10 lines
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir
command | grep pattern - search for pattern in the
output of command
locate file - find all instances of file
```

SYSTEM INFO

```
date - show the current date and time
cal - show this month's calendar
uptime - show current uptime
w - display who is online
whoami - who you are logged in as
finger user - display information about user
uname -a - show kernel information
cat /proc/cpuinfo - cpu information
cat /proc/meminfo - memory information
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default
```

COMPRESSION

```
tar cf file.tar files - create a tar named
file.tar containing files
tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression
tar xzf file.tar.gz - extract a tar using Gzip
tar cjf file.tar.bz2 files - create a tar with Bzip2
compression
tar xjf file.tar.bz2 - extract a tar using Bzip2
gzip file - compresses file and renames it to
file.gz
gzip -d file.gz - decompresses file.gz back to
file
```

NETWORK

```
ping host - ping host and output results
whois domain - get whois information for domain
dig domain - get DNS information for domain
dig -x host - reverse lookup host
wget file - download file
wget -c file - continue a stopped download
```

INSTALLATION

```
Install from source:
./configure
make
make install
dpkg -i pkg.deb - install a package (Debian)
rpm -Uvh pkg.rpm - install a package (RPM)
```

FILE PERMISSIONS

```
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
```

Examples:

```
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

SHORTCUTS

```
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

Cli

commands

- df - Mostra o espaço livre/ocupado de cada partição.

df [opções]

- df -h


```
FILE COMMANDS
ls - directory listing
ls -al - formatted listing with hidden files
cd dir - change directory to dir
cd - change to home
pwd - show current directory
mkdir dir - create directory dir
rm file - remove file
rm -d dir - remove directory dir
rm -rf dir - force remove directory dir *
cp file1 file2 - copy file1 to file2
cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2;
if file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
tail -f file - output the contents of file as it
grows, starting with the last 10 lines
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir
command | grep pattern - search for pattern in the
output of command
locate file - find all instances of file
```

```
SYSTEM INFO
date - show the current date and time
cal - show this month's calendar
uptime - show current uptime
w - display who is online
whoami - who you are logged in as
finger user - display information about user
uname -a - show kernel information
cat /proc/cpuinfo - cpu information
cat /proc/meminfo - memory information
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default
```

```
SEARCHING
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir
command | grep pattern - search for pattern in the
output of command
locate file - find all instances of file
```

```
COMPRESSION
tar cf file.tar files - create a tar named
file.tar containing files
tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression
tar xzf file.tar.gz - extract a tar using Gzip
tar xjf file.tar.bz2 - create a tar with Bzip2
compression
tar xjf file.tar.bz2 - extract a tar using Bzip2
gzip file - compresses file and renames it to
file.gz
gzip -d file.gz - decompresses file.gz back to
file
```

```
NETWORK
ping host - ping host and output results
whois domain - get whois information for domain
dig domain - get DNS information for domain
dig -x host - reverse lookup host
wget file - download file
wget -c file - continue a stopped download
```

```
INSTALLATION
Install from source:
./configure
make
make install
dpkg -i pkg.deb - install a package (Debian)
rpm -Uvh pkg.rpm - install a package (RPM)
```

```
FILE PERMISSIONS
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
Examples:
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

```
PROCESS MANAGEMENT
ps - display your currently active processes
top - display all running processes
kill pid - kill process id pid
killall proc - kill all processes named proc
(use with extreme caution)
bg - lists stopped or background jobs; resume a
stopped job in the background
fg - brings the most recent job to foreground
fg n - brings job n to the foreground
```

```
SHORTCUTS
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

Comandos

- In - Cria links para arquivos e diretórios no sistema.

In [opções] [origem] [link]

Cli commands

FILE COMMANDS

```
ls - directory listing
ls -al - formatted listing with hidden files
cd dir - change directory to dir
cd - change to home
pwd - show current directory
mkdir dir - create directory dir
rm file - remove file
rmdir dir - remove directory dir
rm -rf dir - force remove directory dir *
cp file1 file2 - copy file1 to file2
cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2;
if file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
tail -f file - output the contents of file as it
grows, starting with the last 10 lines
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir
cat file | grep pattern - search for pattern in
output of command
locate file - find all instances of file
```

SYSTEM INFO

```
date - show the current date and time
cal - show this month's calendar
uptime - show current uptime
w - display who is online
whoami - who you are logged in as
finger user - display information about user
uname -a - show kernel information
cat /proc/cpuinfo - cpu information
cat /proc/meminfo - memory information
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default
```

COMPRESSION

```
tar cf file.tar files - create a tar named
file.tar containing files
tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression
tar xzf file.tar.gz - extract a tar using Gzip
tar xzf file.tar.bz2 - extract a tar with Bzip2
tar xjf file.tar.bz2 - extract a tar using Bzip2
gzip file - compresses file and renames it to
file.gz
gzip -d file.gz - decompresses file.gz back to
file
```

NETWORK

```
ping host - ping host and output results
whois domain - get whois information for domain
dig domain - get DNS information for domain
dig -x host - reverse lookup host
wget file - download file
wget -c file - continue a stopped download
```

INSTALLATION

```
Install from source:
./configure
make
make install
dpkg -i pkg.deb - install a package (Debian)
rpm -Uvh pkg.rpm - install a package (RPM)
```

FILE PERMISSIONS

```
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
```

Examples:

```
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

PROCESS MANAGEMENT

```
ps - display your currently active processes
top - display all running processes
kill pid - kill process id pid
killall proc - kill all processes named proc
(use with extreme caution)
bg - lists stopped or background jobs; resume a
stopped job in the background
fg - brings the most recent job to foreground
fg n - brings job n to the foreground
```

SHORTCUTS

```
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

Comandos

- du - Mostra o espaço ocupado por arquivos e sub-diretórios do diretório atual.

du [opções]

- du -hs

Cli
commands

Comandos

- **grep** - Procura por um texto dentro de um arquivo(s) ou no dispositivo de entrada padrão.

`cat /home/cbc/arquivo.txt | grep padrao`

Cli commands

FILE COMMANDS

- ls - directory listing
- ls -al - formatted listing with hidden files
- cd dir - change directory to dir
- cd - change to home
- pwd - show current directory
- mkdir dir - create directory dir
- rm file - remove file
- rm -r dir - recursively remove directory dir
- rm -rf dir - force remove directory dir *
- cp file1 file2 - copy file1 to file2
- cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it doesn't exist
- mv file1 file2 - rename or move file1 to file2; if file2 is an existing directory, moves file1 into directory file2
- ln -s file link - create symbolic link link to file
- touch file - create or update file
- cat > file - places standard input into file
- more file - output the contents of file
- head file - output the first 10 lines of file
- tail file - output the last 10 lines of file
- tail -f file - output the contents of file as it grows, starting with the last 10 lines

SEARCHING

- grep pattern files - search for pattern in files
- grep -r pattern dir - search recursively for pattern in dir
- grep -o pattern file - output only the parts of the file that match the pattern
- locate file - find all instances of file

PROCESS MANAGEMENT

- ps - display your currently active processes
- top - display all running processes
- kill pid - kill process id pid
- killall proc - kill all processes named proc (use with extreme caution)
- bg - lists stopped or background jobs; resume a stopped job in the background
- fg - brings the most recent job to foreground
- fg n - brings job n to the foreground

SHORTCUTS

- Ctrl+C - halts the current command
- Ctrl+Z - stops the current command, resume with fg in the foreground or bg in the background
- Ctrl+D - log out of current session, similar to exit
- Ctrl+W - erases one word in the current line
- Ctrl+U - erases the whole line
- Ctrl+R - type to bring up a recent command
- !! - repeats the last command
- exit - log out of current session

SYSTEM INFO

- date - show the current date and time
- cal - show this month's calendar
- uptime - show current uptime
- w - display who is online
- whoami - who you are logged in as
- finger user - display information about user
- uname -a - show kernel information
- cat /proc/cpuinfo - cpu information
- cat /proc/meminfo - memory information
- man command - show the manual for command
- df - show disk usage
- du - show directory space usage
- free - show memory and swap usage
- whereis app - show possible locations of app
- which app - show which app will be run by default

COMPRESSION

- tar cf file.tar files - create a tar named file.tar containing files
- tar xf file.tar - extract the files from file.tar
- tar czf file.tar.gz files - create a tar with Gzip compression
- tar xzf file.tar.gz - extract a tar using Gzip
- tar cJf file.tar.bz2 files - create a tar with Bzip2 compression
- tar xJf file.tar.bz2 - extract a tar using Bzip2
- gzip file - compresses file and renames it to file.gz
- gunzip file.gz - decompresses file and renames it back to file

NETWORK

- ifconfig - configure network interfaces
- hostname - get the system's hostname
- dig domain - get DNS information for domain
- dig -x host - reverse lookup host
- wget file - download file
- wget -c file - continue a stopped download

INSTALLATION

- Install from source:
 - ./configure
 - make
 - make install
- dpkg -i pkg.deb - install a package (Debian)
- rpm -Uvh pkg.rpm - install a package (RPM)

FILE PERMISSIONS

- chmod octal file - change the permissions of file to octal, which can be found separately for user, group, and world by adding:
 - 4 - read (r)
 - 2 - write (w)
 - 1 - execute (x)

Examples:

```
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

FILE COMMANDS

```
ls - directory listing
ls -al - formatted listing with hidden files
cd dir - change directory to dir
cd - change to home
pwd - show current directory
mkdir dir - create directory dir
rm file - remove file
rm -r dir - remove directory dir
cp file1 file2 - copy file1 to file2
cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2;
if file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
tail -f file - output the contents of file as it
grows, starting with the last 10 lines
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir
grep -o pattern - search for pattern in the
output of command
locate file - find all instances of file
```

SYSTEM INFO

```
date - show the current date and time
cal - show this month's calendar
uptime - show current uptime
w - display who is online
whoami - who you are logged in as
finger user - display information about user
uname -a - show kernel information
cat /proc/cpuinfo - cpu information
cat /proc/meminfo - memory information
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default
```

COMPRESSION

```
tar cf file.tar files - create a tar named
file.tar containing files
tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression
tar xzf file.tar.gz - extract a tar using Gzip
tar xjf file.tar.bz2 - extract a tar using Bzip2
gzip file - compresses file and renames it to
file.gz
gzip -d file.gz - decompresses file.gz back to
file
```

NETWORK

```
ping host - ping host and output results
whois domain - get whois information for domain
dig domain - get DNS information for domain
dig -x host - reverse lookup host
wget file - download file
wget -c file - continue a stopped download
```

INSTALLATION

```
Install from source:
./configure
make
make install
dpkg -i pkg.deb - install a package (Debian)
rpm -Uvh pkg.rpm - install a package (RPM)
```

FILE PERMISSIONS

```
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
```

Examples:

```
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

PROCESS MANAGEMENT

```
ps - display your currently active processes
top - display all running processes
kill pid - kill process id pid
killall proc - kill all processes named proc
(use with extreme caution)
bg - lists stopped or background jobs; resume a
stopped job in the background
fg - brings the most recent job to foreground
fg n - brings job n to the foreground
```

SHORTCUTS

```
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

Comandos

- more - Permite fazer a paginação de arquivos ou da entrada padrão.

Cli

commands

Comandos

- uptime - Mostra o tempo de execução do sistema desde que o computador foi ligado.

uptime

Cli
commands

FILE COMMANDS

- ls - directory listing
- ls -al - formatted listing with hidden files
- cd dir - change directory to dir
- cd - change to home
- pwd - show current directory
- mkdir dir - create directory dir
- rm file - remove file
- rm -r dir - remove directory dir
- rm -rf dir - force remove directory dir *
- cp file1 file2 - copy file1 to file2
- cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it doesn't exist
- mv file1 file2 - rename or move file1 to file2; if file2 is an existing directory, moves file1 into directory file2
- ln -s file link - create symbolic link link to file
- touch file - create or update file
- cat > file - places standard input into file
- more file - output the contents of file
- head file - output the first 10 lines of file
- tail file - output the last 10 lines of file
- tail -f file - output the contents of file as it grows, starting with the last 10 lines

SEARCH

- grep pattern dir - search for pattern in files
- grep -r pattern dir - search recursively for pattern in dir
- cat filename | grep pattern - search for pattern in output of command
- locate file - find all instances of file

PROCESS MANAGEMENT

- ps - display your currently active processes
- top - display all running processes
- kill pid - kill process id pid
- killall proc - kill all processes named proc (use with extreme caution)
- bg - lists stopped or background jobs; resume a stopped job in the background
- fg - brings the most recent job to foreground
- fg n - brings job n to the foreground

SHORTCUTS

- Ctrl+C - halts the current command
- Ctrl+Z - stops the current command, resume with fg in the foreground or bg in the background
- Ctrl+D - log out of current session, similar to exit
- Ctrl+W - erases one word in the current line
- Ctrl+U - erases the whole line
- Ctrl+R - type to bring up a recent command
- !! - repeats the last command
- exit - log out of current session

SYSTEM INFO

- date - show the current date and time
- cal - show this month's calendar
- uptime - show current uptime
- w - display who is online
- whoami - who you are logged in as
- finger user - display information about user
- uname -a - show kernel information
- cat /proc/cpuinfo - cpu information
- cat /proc/meminfo - memory information
- man command - show the manual for command
- df - show disk usage
- du - show directory space usage
- free - show memory and swap usage
- whereis app - show possible locations of app
- which app - show which app will be run by default

COMPRESSION

- tar cf file.tar files - create a tar named file.tar containing files
- tar xf file.tar - extract the files from file.tar
- tar czf file.tar.gz files - create a tar with Gzip compression
- tar xzf file.tar.gz - extract a tar using Gzip
- tar czf file.tar.bz2 files - create a tar with Bzip2
- tar xzf file.tar.bz2 - extract a tar using Bzip2
- gzip file - compresses file and renames it to file.gz
- gunzip file.gz - decompresses file.gz back to file

NETWORK

- ping host - ping host and output results
- whois domain - get whois information for domain
- dig domain - get DNS information for domain
- dig -x host - reverse lookup host
- wget file - download file
- wget -c file - continue a stopped download

INSTALLATION

- Install from source:
./configure
make
make install
- dpkg -i pkg.deb - install a package (Debian)
- rpm -Uvh pkg.rpm - install a package (RPM)

FILE PERMISSIONS

- chmod octal file - change the permissions of file to octal, which can be found separately for user, group, and world by adding:
 - 4 - read (r)
 - 2 - write (w)
 - 1 - execute (x)

Examples:

chmod 777 - read, write, execute for all
chmod 755 - rxw for owner, rx for group and world
For more options, see man chmod.

FILE COMMANDS

- ls - directory listing
- ls -al - formatted listing with hidden files
- cd dir - change directory to dir
- cd - change to home
- pwd - show current directory
- mkdir dir - create directory dir
- rm file - remove file
- rm -r dir - remove directory dir
- rm -rf dir - force remove directory dir *
- cp file1 file2 - copy file1 to file2
- cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it doesn't exist
- mv file1 file2 - rename or move file1 to file2; if file2 is an existing directory, moves file1 into directory file2
- ln -s file link - create symbolic link link to file
- touch file - create or update file
- cat > file - places standard input into file
- more file - output the contents of file
- head file - output the first 10 lines of file
- tail file - output the last 10 lines of file
- tail -f file - output the contents of file as it grows, starting with the last 10 lines

SEARCHING

- grep pattern files - search for pattern in files
- grep -r pattern dir - search recursively for pattern in dir
- command | grep pattern - search for pattern in the output of command
- locate file - find all instances of file

PROCESS MANAGEMENT

- ps - display your currently active processes
- top - display all running processes
- kill pid - kill process id pid
- killall proc - kill all processes named proc (use with extreme caution)
- bg - lists stopped or background jobs; resume a stopped job in the background
- fg - brings the most recent job to foreground
- fg n - brings job n to the foreground

SHORTCUTS

- Ctrl+C - halts the current command
- Ctrl+Z - stops the current command, resume with fg in the foreground or bg in the background
- Ctrl+D - log out of current session, similar to exit
- Ctrl+W - erases one word in the current line
- Ctrl+U - erases the whole line
- Ctrl+R - type to bring up a recent command
- !! - repeats the last command
- exit - log out of current session

SYSTEM INFO

- date - show the current date and time
- cal - show this month's calendar
- uptime - show current uptime
- w - display who is online
- whoami - who you are logged in as
- finger user - display information about user
- uname -a - show kernel information
- cat /proc/cpuinfo - cpu information
- cat /proc/meminfo - memory information
- man command - show the manual for command
- df - show disk usage
- du - show directory space usage
- free - show memory and swap usage
- whereis app - show possible locations of app
- which app - show which app will be run by default

COMPRESSION

- tar cf file.tar files - create a tar named file.tar containing files
- tar xf file.tar - extract the files from file.tar
- tar czf file.tar.gz files - create a tar with Gzip compression
- tar xzf file.tar.gz - extract a tar using Gzip
- tar cjf file.tar.bz2 - create a tar with Bzip2 compression
- tar xjf file.tar.bz2 - extract a tar using Bzip2
- gzip file - compresses file and renames it to file.gz
- gzip -d file.gz - decompresses file.gz back to file

NETWORK

- ping host - ping host and output results
- whois domain - get whois information for domain
- dig domain - get DNS information for domain
- dig -x host - reverse lookup host
- wget file - download file
- wget -c file - continue a stopped download

INSTALLATION

- Install from source:
 - ./configure
 - make
 - make install
- dpkg -i pkg.deb - install a package (Debian)
- rpm -Uvh pkg.rpm - install a package (RPM)

FILE PERMISSIONS

- chmod octal file - change the permissions of file to octal, which can be found separately for user, group, and world by adding:
 - 4 - read (r)
 - 2 - write (w)
 - 1 - execute (x)

Examples:

- chmod 777 - read, write, execute for all
- chmod 755 - rwx for owner, rx for group and world

For more options, see man chmod.

Comandos

- reboot - Reinicia o computador.
- reboot

Cli commands

Comandos

- shutdown - Desliga/reinicia o computador imediatamente ou após determinado tempo (programável) de forma segura.

shutdown [opções] [hora] [mensagem]

- [opções] -hr

- [hora] HH:MM

- [mensagem] “chega de pc!!!”

FILE COMMANDS

```
ls - directory listing
ls -al - formatted listing with hidden files
cd dir - change directory to dir
cd - change to home
pwd - show current directory
mkdir dir - create directory dir
rm file - delete file file
rm -d dir - delete directory dir
rm -rf dir - force remove directory dir *
cp file1 file2 - copy file1 to file2
cp -x dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2
if file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
tail -f file - output the contents of file as it
grows, starting with the last 10 lines
```

```
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in all files under dir
locate file - find all instances of file
```

PROCESS MANAGEMENT

```
ps - display your currently active processes
top - display all running processes
kill pid - kill process id pid
killall proc - kill all processes named proc
(use with extreme caution)
bg - lists stopped or background jobs; resume a
stopped job in the background
fg - lists stopped or background jobs; resume a
stopped job in the foreground
Ctrl+Z - suspend a foreground process and
return it to the background
```

SHORTCUTS

```
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

SYSTEM INFO

```
date - show the current date and time
cal - show this month's calendar
uptime - show current uptime
w - display who is online
whoami - who you are logged in as
finger user - display information about user
uname -a - show kernel information
cat /proc/cpuinfo - cpu information
cat /proc/meminfo - memory information
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default
```

COMPRESSION

```
tar cf file.tar files - create a tar named
file.tar containing files
tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression
tar xzf file.tar.gz - extract a tar using Gzip
tar cf file.tar.bz2 files - create a tar with Bzip2
tar xjf file.tar.bz2 - extract a tar using Bzip2
gzip file - compresses file and renames it to
file.gz
gunzip file.gz - decompress file.gz back to
file
```

NETWORK

```
ping host - ping host and output results
whois domain - get whois information for domain
dig domain - get DNS information for domain
dig -x host - reverse lookup host
wget file - download file
curl -c file - continue a stopped download
```

INSTALLATION

```
Install from source:
./configure
make
make install
dpkg -i pkg.deb - install a package (Debian)
rpm -Uvh pkg.rpm - install a package (RPM)
```

FILE PERMISSIONS

```
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
```

Examples:

```
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

FHS - Filesystem Hierarchy Standard

/bin/

Comandos binários essenciais para todos os usuários (ex: cat, ls, cp)

/boot/

Arquivos do **Boot loader** (ex: núcleo, initrd).

/dev/

Dispositivos (ex: /dev/null).

FILE COMMANDS

```
ls - directory listing
ls -al - formatted listing with hidden files
cp file1 file2 - copy file1 to file2
mkdir dir - create a directory dir
rm file - delete file
rm -r dir - delete directory dir
rm -f file - force remove file
cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2
if file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
```

SEARCHING

```
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir
command | grep pattern - search for pattern in the
output of command
locate file - find all instances of file
```

PROCESS MANAGEMENT

```
ps - display your currently active processes
top - display all running processes
kill pid - kill process id pid
killall proc - kill all processes named proc
(use with extreme caution)
bg - lists stopped or background jobs; resume a
stopped job in the background
fg - brings the most recent job to foreground
fg n - brings job n to the foreground
```

SHORTCUTS

```
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resume with
fg in the foreground or bg in the background
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

SYSTEM INFO

```
date - show the current date and time
cal - show this month's calendar
time - show the execution time
who - display who is logged in as
finger user - display information about user
uname -a - show kernel information
cat /proc/cpuinfo - cpu information
cat /proc/meminfo - memory information
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default
```

COMPRESSION

```
tar cf file.tar files - create a tar named
file.tar containing files
tar xzf file.tar - extract the files from file.tar
with Gzip compression
tar xzf file.tar.gz - extract a tar using Gzip
tar cjf file.tar.bz2 - create a tar with Bzip2
compression
tar xjf file.tar.bz2 - extract a tar using Bzip2
gzip file - compresses file and renames it to
file.gz
gzip -d file.gz - decompresses file.gz back to
file
```

NETWORK

```
ping host - ping host and output results
whois domain - get whois information for domain
dig domain - get DNS information for domain
dig -x host - reverse lookup host
wget file - download file
wget -c file - continue a stopped download
```

INSTALLATION

```
Install from source:
./configure
make
make install
dpkg -i pkg.deb - install a package (Debian)
rpm -Uvh pkg.rpm - install a package (RPM)
```

FILE PERMISSIONS

```
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
● 4 - read (r)
● 2 - write (w)
● 1 - execute (x)
```

Examples:

```
chmod 777 - read, write, execute for all
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

CLI
commands

FHS - Filesystem Hierarchy Standard

/etc/

Arquivos de configuração específicos do computador.

/etc/X11/

Arquivos de configuração para o X Window System, versão 11.

/home/

Diretórios de usuários.

/lib/

Diretório com as bibliotecas essenciais para os arquivos binários contidos nos diretórios /bin/ e /sbin/.

FILE COMMANDS

```
ls - directory listing
ls -al - formatted listing with hidden files
ls -la - long listing with hidden files
mkdir dir - create a directory dir
rm file - delete file
rm -r dir - delete directory dir
rm -f file - force remove file
cp file1 file2 - copy file1 to file2
cp -r dir1 dir2 - create dir2 if it
doesn't exist
mv file1 file2 - rename or move file1 to file2
if file2 is an existing directory, moves file1 into
directory file2
ln -s file link - create symbolic link link to file
touch file - create or update file
cat > file - places standard input into file
more file - output the contents of file
head file - output the first 10 lines of file
tail file - output the last 10 lines of file
```

SEARCHING

```
grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for
pattern in dir
command | grep pattern - search for pattern in the
output of command
locate file - find all instances of file
```

PROCESS MANAGEMENT

```
ps - display your currently active processes
top - display all running processes
kill pid - kill process id pid
killall proc - kill all processes named proc
(use with extreme caution)
bg - lists stopped or background jobs; resume a
stopped job in the background
fg - brings the most recent job to foreground
fg n - brings job n to the foreground
```

SHORTCUTS

```
Ctrl+C - halts the current command
Ctrl+Z - stops the current command, resumes it
Ctrl+D - log out of current session, similar to exit
Ctrl+W - erases one word in the current line
Ctrl+U - erases the whole line
Ctrl+R - type to bring up a recent command
!! - repeats the last command
exit - log out of current session
```

SYSTEM INFO

```
date - show the current date and time
cal - show this month's calendar
time - show the execution time
who - display who is logged in as
finger user - display information about user
uname -a - show kernel information
cat /proc/cpuinfo - cpu information
cat /proc/meminfo - memory information
man command - show the manual for command
df - show disk usage
du - show directory space usage
free - show memory and swap usage
whereis app - show possible locations of app
which app - show which app will be run by default
```

COMPRESSION

```
tar cf file.tar files - create a tar named
file.tar containing files
tar xf file.tar - extract the files from file.tar
tar czf file.tar.gz files - create a tar with
Gzip compression
tar xzf file.tar.gz - extract a tar using Gzip
tar cjf file.tar.bz2 - create a tar with Bzip2
compression
tar xjf file.tar.bz2 - extract a tar using Bzip2
gzip file - compresses file and renames it to
file.gz
gzip -d file.gz - decompresses file.gz back to
file
```

NETWORK

```
ping host - ping host and output results
nslookup domain - get whois information for domain
dig domain - get DNS information for domain
dig -x host - reverse lookup host
wget file - download file
wget -c file - continue a stopped download
```

INSTALLATION

```
Install from source:
./configure
make
make install
dpkg -i pkg.deb - install a package (Debian)
rpm -Uvh pkg.rpm - install a package (RPM)
```

FILE PERMISSIONS

```
chmod octal file - change the permissions of file
to octal, which can be found separately for user,
group, and world by adding:
• 4 - read (r)
• 2 - write (w)
• 1 - execute (x)
Example:
chmod 755 - rwx for owner, rx for group and world
For more options, see man chmod.
```

FHS - Filesystem Hierarchy Standard

/proc/

Sistemas de arquivo virtual, que possui o estado do núcleo e processos do sistema; a maioria dos arquivos é baseada no formato texto (ex: tempo de execução, rede).

/root/

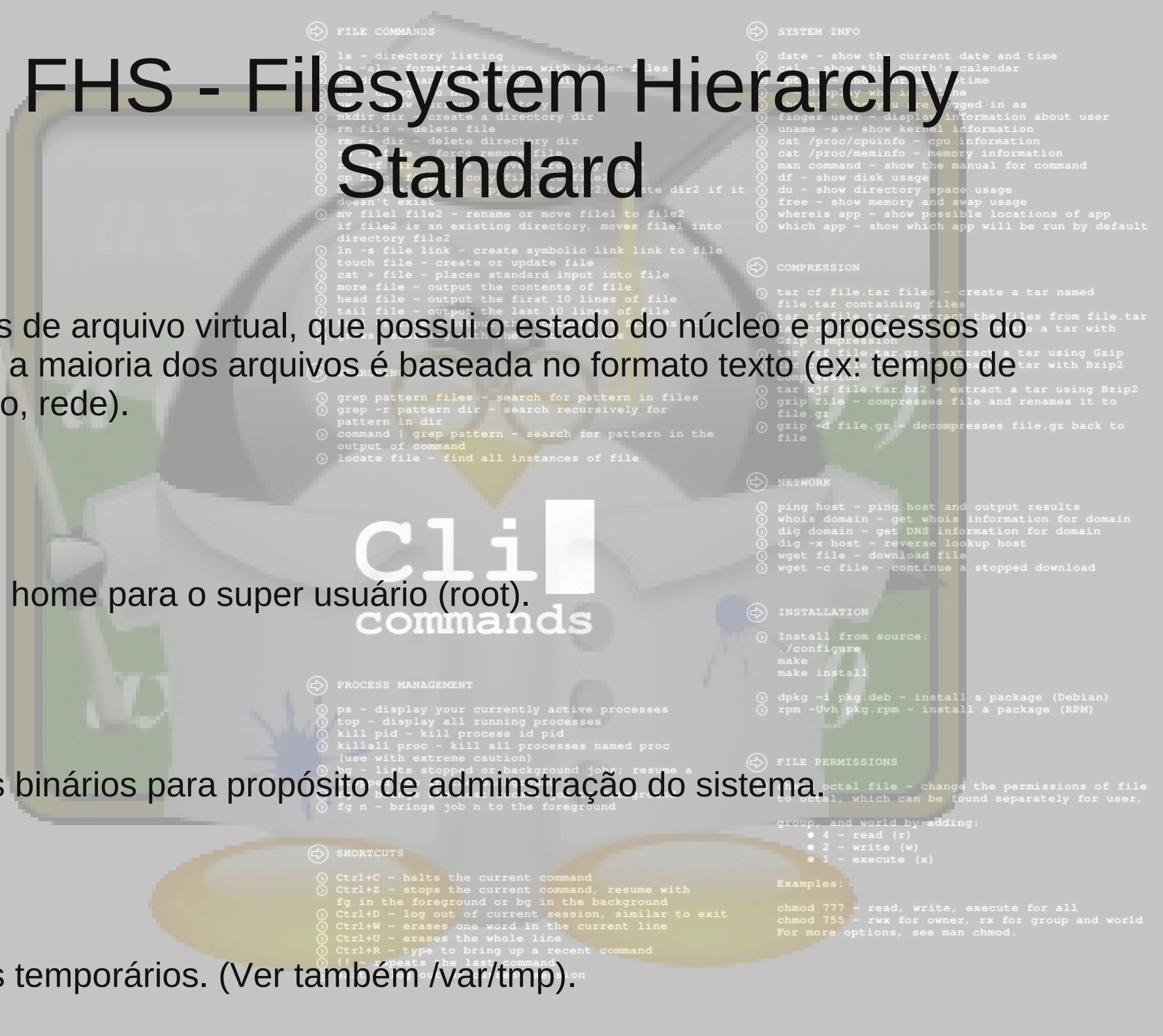
Diretório home para o super usuário (root).

/sbin/

Arquivos binários para propósito de administração do sistema.

/tmp/

Arquivos temporários. (Ver também /var/tmp).



FHS - Filesystem Hierarchy Standard

/usr/

Hierarquia secundária para dados compartilhados de usuários, cujo acesso é restrito apenas para leitura.

/usr/include/

Diretório padrão para arquivos do tipo header.

/usr/lib/

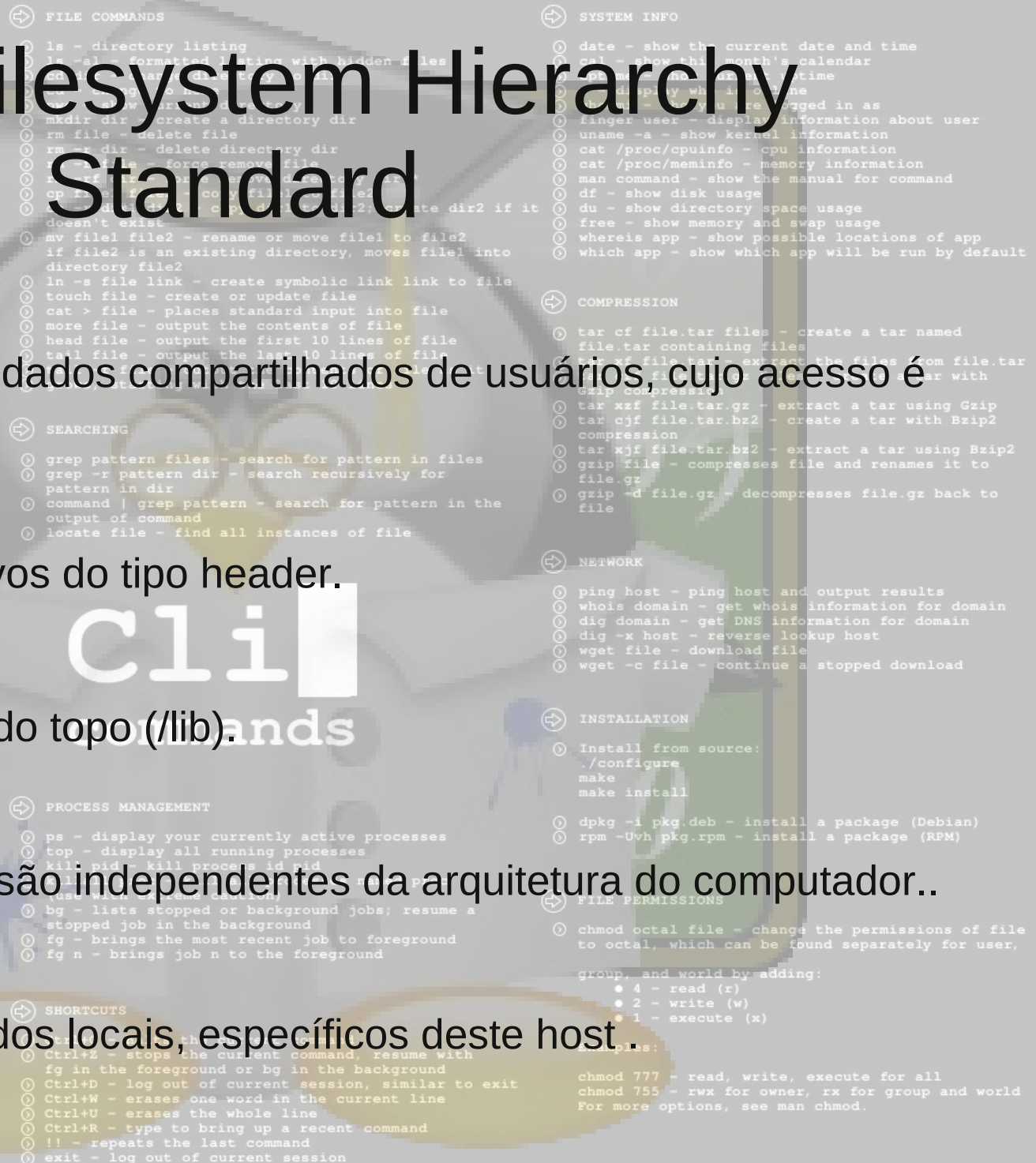
O mesmo que a hierarquia do topo (/lib).

/usr/share/

Dados compartilhados que são independentes da arquitetura do computador..

/usr/local/

Hierarquia terciária com dados locais, específicos deste host.



FHS - Filesystem Hierarchy Standard

/var/

Arquivos "variáveis", como logs, base de dados, páginas Web e arquivos de e-mail.

/var/lock/

Arquivos de lock. Utilizados para manter o controle sobre recursos em uso.

/var/log/

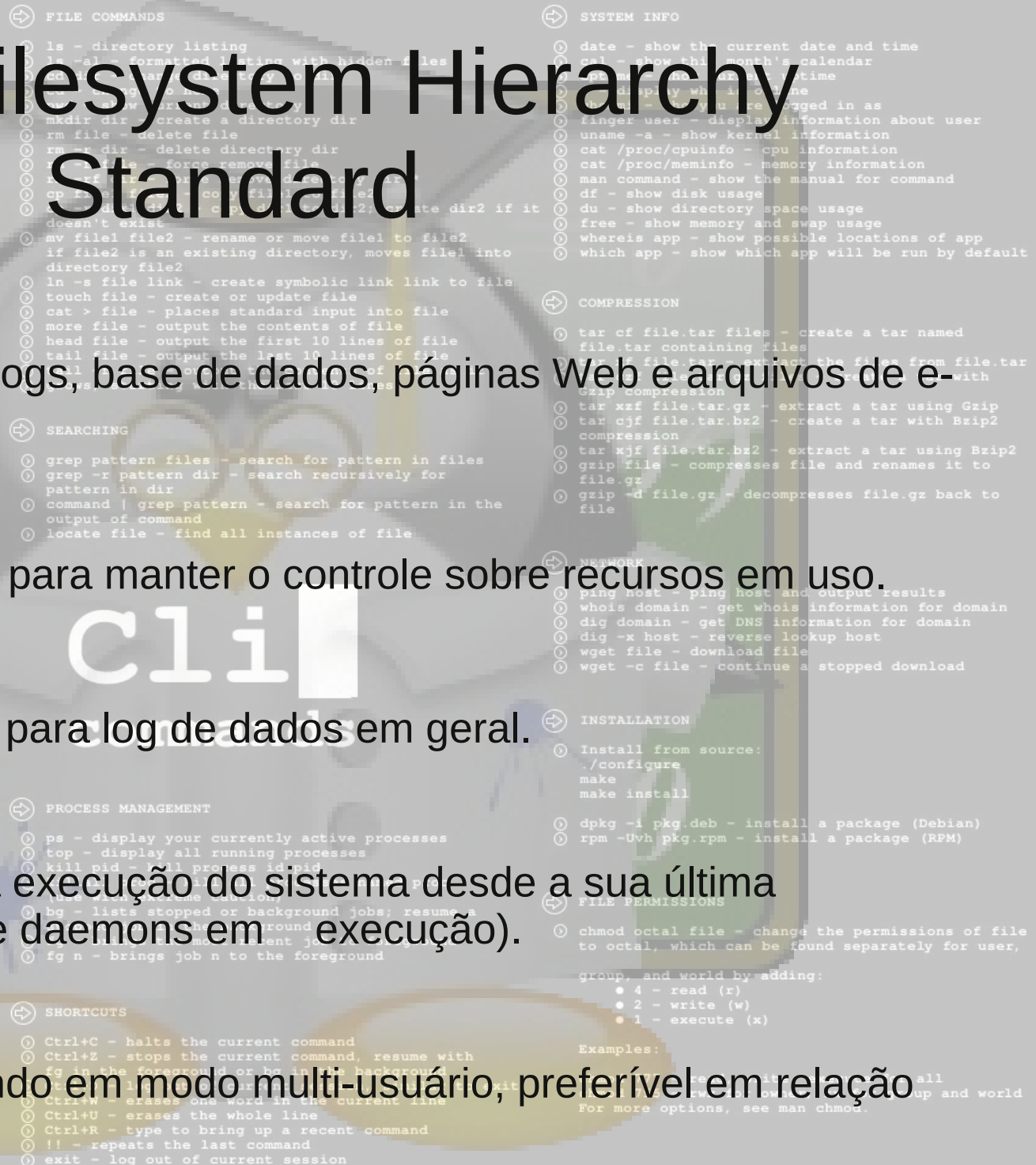
Arquivos para log. Utilizado para log de dados em geral.

/var/run/

Contém informação sobre a execução do sistema desde a sua última inicialização. (ex: usuários e daemons em execução).

/var/tmp/

Arquivos temporários. Quando em modo multi-usuário, preferível em relação ao /tmp.



Foca Linux

Aplicativos Locais Sistema Ter 16 Mar, 11:35 cbbc

Foca GNU/Linux: Página oficial - Mozilla Firefox

Arquivo Editar Exibir Histórico Favoritos Ferramentas Ajuda

http://focalinux.cipsga.org.br/ wget manj

Mais visitados Getting Started Latest Headlines

Gmail - Entrada - damascen... projetoCursoLinux.doc Foca GNU/Linux: Página oficial

guia|Foca GNU/Linux

Principal Novidades Guia On-Line Características Download Humor Sugestões Pesquisa E-mail

Novidades

Iniciante - 4.11 Intermediário - 5.60 Avançado - 6.42

Adicione o guia Foca Linux no campo de pesquisas do Firefox ou Internet Explorer 7, **clikando aqui**.
Adicione a barra de pesquisa do guia Foca Linux no Firefox, **clikando aqui**.

BICAMPEÃO!!! O Foca Linux vence novamente o premio favoritos de 2007 do tradicional site de noticias br-linux (<http://br-linux.org>) com quase o triplo do percentual de votos do ano passado (26% e 10% em 2006). Veja o resultado final em <http://br-linux.org/linux/favoritos-2007-34-resultados-nas-categorias-da-comunidade>.

Spirit Linux (<http://www.spiritlinux.com.br>), empresa que apóia o guia Foca Linux é 5a colocada entre as empresas que apóiam a comunidade no premio favoritos de 2007 do site de noticias br-linux (<http://br-linux.org>).

18/11/2007 - Gleydson Mazioli é primeiro colocado em certificação Linux internacional. Leia mais **clikando aqui**.

OBS.: Para receber um e-mail avisando sobre novas versões deste guia e lançamento de novos níveis de aprendizado, preencha o formulário localizado ao final desta página. Seu e-mail será usando somente para notificação de novas versões e de modo algum será passado a terceiros para prática de SPAM.

O *Foca GNU/Linux* é um guia que traz desde explicações básicas sobre computadores e o sistema *GNU/Linux* até a administração e segurança do sistema. Os assuntos do guia são explicados em linguagem clara e organizados de forma linear e didática, evitando termos técnicos nos níveis iniciais, até que o usuário se habitue com sua utilização de forma gradual. Isto faz o guia indispensável para o usuário *GNU/Linux* iniciante ou os mais curiosos. Todas as seções do guia *Foca GNU/Linux* tem exemplos para melhor compreensão do assunto explicado e links dinâmicos que te levam facilmente a assuntos relacionados (na versão HTML).

Para facilitar a leitura do guia, eu o dividi em três níveis de aprendizado: Iniciante, Intermediário e Avançado.

Localizar: Anterior Próxima Realçar tudo Diferenciar maiúsc./minúsc. Texto não encontrado

Concluído

Foca GNU/Linu... wallpapers - N... Rolha - Naveg... slideMiniCurso... Downloads cbbc@pc05-lab...

•Referências - Pra onde eu corro?

- man / info
- Google
- vivaolinux.com.br
- identi.ca
- newsletter
- Googlegroups
- irc.freenode.net

Linux

Info Linux
@vivaolinux

?

