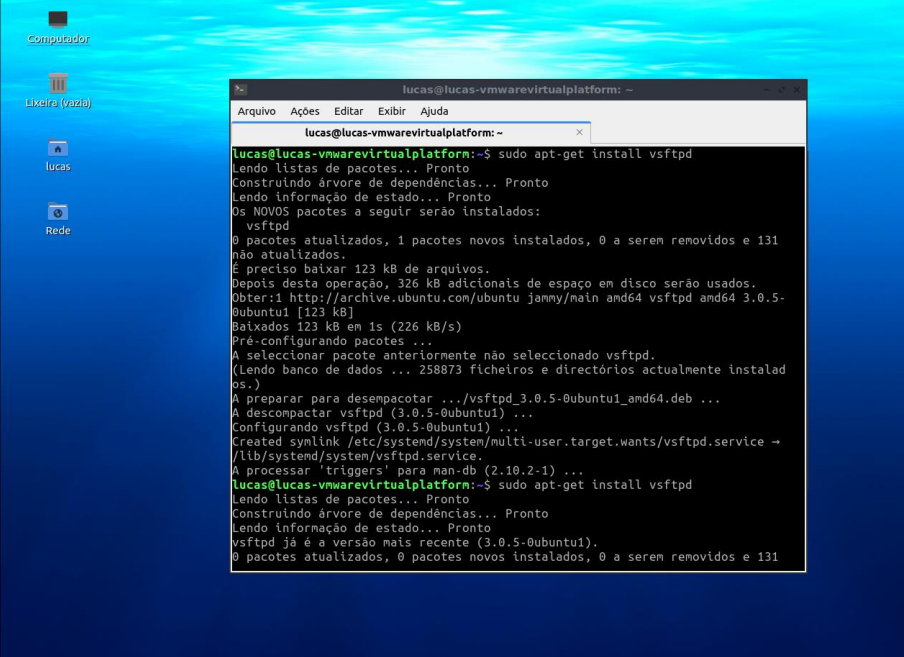


**LUCAS DOS SANTOS SILVA**

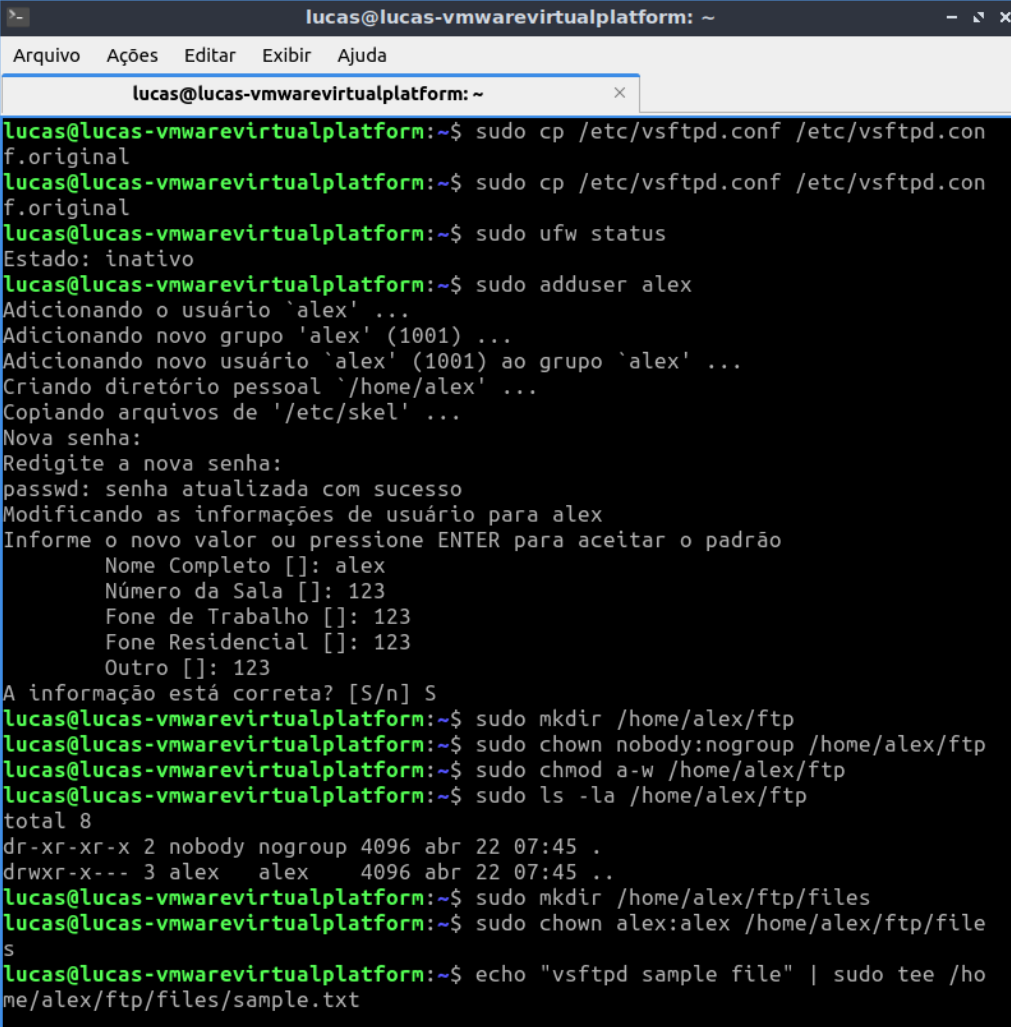
## 1 – Instalando Vsftpd



The screenshot shows a terminal window titled 'lucas@lucas-vmwarevirtualplatform: ~'. The user runs the command 'sudo apt-get install vsftpd'. The terminal output shows the package list being updated, dependencies being resolved, and the vsftpd package being installed. The installation process includes downloading the package, extracting it, and configuring it. The user then runs 'sudo apt-get install vsftpd' again, which shows that the package is already installed and up-to-date.

```
lucas@lucas-vmwarevirtualplatform:~$ sudo apt-get install vsftpd
Lendo listas de pacotes... Pronto
Construindo árvore de dependências... Pronto
Lendo informação de estado... Pronto
Os NOVOS pacotes a seguir serão instalados:
  vsftpd
0 pacotes atualizados, 1 pacotes novos instalados, 0 a serem removidos e 131
não atualizados.
É preciso baixar 123 kB de arquivos.
Depois desta operação, 326 kB adicionais de espaço em disco serão usados.
Obter:1 http://archive.ubuntu.com/ubuntu jammy/main amd64 vsftpd amd64 3.0.5-
0ubuntu1 [123 kB]
Baixados 123 kB em 1s (226 kB/s)
Pré-configurando pacotes ...
A seleccionar pacote anteriormente não seleccionado vsftpd.
(Lendo banco de dados ... 258873 ficheiros e directórios actualmente instalad
os.)
A preparar para desempacotar .../vsftpd_3.0.5-0ubuntu1_amd64.deb ...
A descompactar vsftpd (3.0.5-0ubuntu1) ...
Configurando vsftpd (3.0.5-0ubuntu1) ...
Created symlink /etc/systemd/system/multi-user.target.wants/vsftpd.service →
/lib/systemd/system/vsftpd.service.
A processar 'triggers' para man-db (2.10.2-1) ...
lucas@lucas-vmwarevirtualplatform:~$ sudo apt-get install vsftpd
Lendo listas de pacotes... Pronto
Construindo árvore de dependências... Pronto
Lendo informação de estado... Pronto
vsftpd já é a versão mais recente (3.0.5-0ubuntu1).
0 pacotes atualizados, 0 pacotes novos instalados, 0 a serem removidos e 131
```

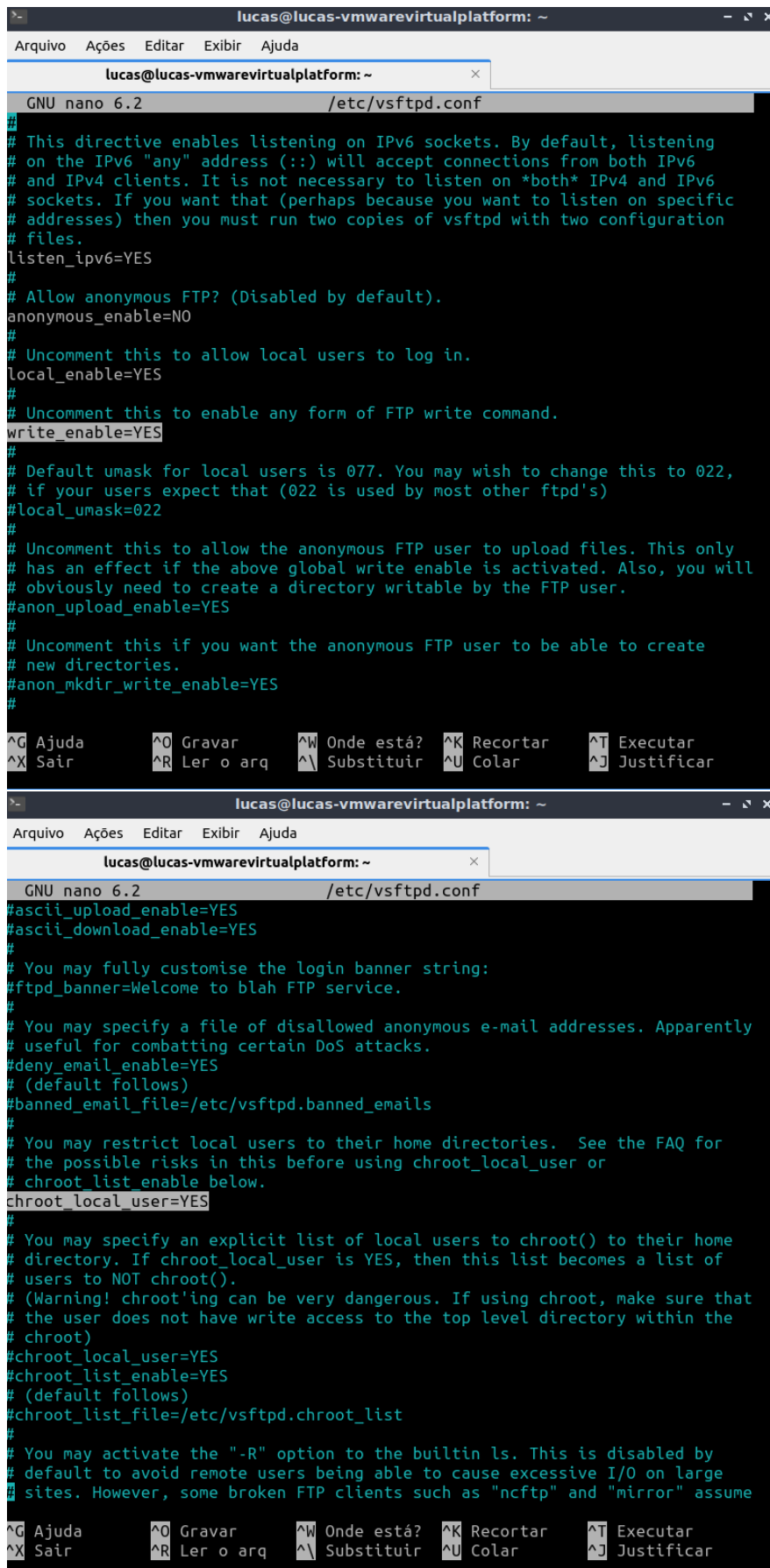
## 2 – Criando o diretório do usuário



The screenshot shows a terminal window titled 'lucas@lucas-vmwarevirtualplatform: ~'. The user runs several commands to set up the environment for vsftpd. First, they copy the vsftpd configuration file to its original location. Then, they check the status of the ufw firewall, which is inactive. Next, they add a new user named 'alex' with a home directory at '/home/alex'. They then create a directory '/home/alex/ftp' and set permissions for it. Finally, they create a file 'sample.txt' in the directory.

```
lucas@lucas-vmwarevirtualplatform:~$ sudo cp /etc/vsftpd.conf /etc/vsftpd.con
f.original
lucas@lucas-vmwarevirtualplatform:~$ sudo cp /etc/vsftpd.conf /etc/vsftpd.con
f.original
lucas@lucas-vmwarevirtualplatform:~$ sudo ufw status
Estado: inativo
lucas@lucas-vmwarevirtualplatform:~$ sudo adduser alex
Adicionando o usuário 'alex' ...
Adicionando novo grupo 'alex' (1001) ...
Adicionando novo usuário 'alex' (1001) ao grupo 'alex' ...
Criando diretório pessoal '/home/alex' ...
Copiando arquivos de '/etc/skel' ...
Nova senha:
Redigite a nova senha:
passwd: senha atualizada com sucesso
Modificando as informações de usuário para alex
Informe o novo valor ou pressione ENTER para aceitar o padrão
Nome Completo []: alex
Número da Sala []: 123
Fone de Trabalho []: 123
Fone Residencial []: 123
Outro []: 123
A informação está correta? [S/n] S
lucas@lucas-vmwarevirtualplatform:~$ sudo mkdir /home/alex/ftp
lucas@lucas-vmwarevirtualplatform:~$ sudo chown nobody:nogroup /home/alex/ftp
lucas@lucas-vmwarevirtualplatform:~$ sudo chmod a-w /home/alex/ftp
lucas@lucas-vmwarevirtualplatform:~$ sudo ls -la /home/alex/ftp
total 8
dr-xr-xr-x 2 nobody nogroup 4096 abr 22 07:45 .
drwxr-x-- 3 alex alex 4096 abr 22 07:45 ..
lucas@lucas-vmwarevirtualplatform:~$ sudo mkdir /home/alex/ftp/files
lucas@lucas-vmwarevirtualplatform:~$ sudo chown alex:alex /home/alex/ftp/file
s
lucas@lucas-vmwarevirtualplatform:~$ echo "vsftpd sample file" | sudo tee /ho
me/alex/ftp/files/sample.txt
```

### 3 – Configurando vsftpd



The image shows two screenshots of a terminal window titled 'lucas@lucas-vmwarevirtualplatform: ~'. The terminal is running the nano 6.2 editor, editing the file '/etc/vsftpd.conf'. The first screenshot shows the initial configuration with options like 'listen\_ipv6=YES', 'anonymous\_enable=NO', 'local\_enable=YES', 'write\_enable=YES', 'local\_umask=022', 'anon\_upload\_enable=YES', and 'anon\_mkdir\_write\_enable=YES'. The second screenshot shows the configuration after several changes: 'ascii\_upload\_enable=YES', 'ascii\_download\_enable=YES', 'ftpd\_banner=Welcome to blah FTP service.', 'deny\_email\_enable=YES', 'banned\_email\_file=/etc/vsftpd.banned\_emails', 'chroot\_local\_user=YES', 'chroot\_local\_user=YES', 'chroot\_list\_enable=YES', 'chroot\_list\_file=/etc/vsftpd.chroot\_list', and 'ls\_option="-R"'. The terminal window includes a menu bar with 'Arquivo', 'Ações', 'Editar', 'Exibir', and 'Ajuda', and a status bar with keyboard shortcuts.

```
lucas@lucas-vmwarevirtualplatform: ~
GNU nano 6.2 /etc/vsftpd.conf
# This directive enables listening on IPv6 sockets. By default, listening
# on the IPv6 "any" address (:::) will accept connections from both IPv6
# and IPv4 clients. It is not necessary to listen on *both* IPv4 and IPv6
# sockets. If you want that (perhaps because you want to listen on specific
# addresses) then you must run two copies of vsftpd with two configuration
# files.
listen_ipv6=YES
#
# Allow anonymous FTP? (Disabled by default).
anonymous_enable=NO
#
# Uncomment this to allow local users to log in.
local_enable=YES
#
# Uncomment this to enable any form of FTP write command.
write_enable=YES
#
# Default umask for local users is 077. You may wish to change this to 022,
# if your users expect that (022 is used by most other ftpd's)
local_umask=022
#
# Uncomment this to allow the anonymous FTP user to upload files. This only
# has an effect if the above global write enable is activated. Also, you will
# obviously need to create a directory writable by the FTP user.
anon_upload_enable=YES
#
# Uncomment this if you want the anonymous FTP user to be able to create
# new directories.
anon_mkdir_write_enable=YES
#
^G Ajuda      ^O Gravar     ^W Onde está? ^K Recortar   ^T Executar
^X Sair       ^R Ler o arq  ^_ Substituir ^U Colar     ^J Justificar

lucas@lucas-vmwarevirtualplatform: ~
GNU nano 6.2 /etc/vsftpd.conf
#ascii_upload_enable=YES
#ascii_download_enable=YES
#
# You may fully customise the login banner string:
ftpd_banner=Welcome to blah FTP service.
#
# You may specify a file of disallowed anonymous e-mail addresses. Apparently
# useful for combatting certain DoS attacks.
#deny_email_enable=YES
# (default follows)
#banned_email_file=/etc/vsftpd.banned_emails
#
# You may restrict local users to their home directories. See the FAQ for
# the possible risks in this before using chroot_local_user or
# chroot_list_enable below.
chroot_local_user=YES
#
# You may specify an explicit list of local users to chroot() to their home
# directory. If chroot_local_user is YES, then this list becomes a list of
# users to NOT chroot().
# (Warning! chroot'ing can be very dangerous. If using chroot, make sure that
# the user does not have write access to the top level directory within the
# chroot)
#chroot_local_user=YES
#chroot_list_enable=YES
# (default follows)
#chroot_list_file=/etc/vsftpd.chroot_list
#
# You may activate the "-R" option to the builtin ls. This is disabled by
# default to avoid remote users being able to cause excessive I/O on large
# sites. However, some broken FTP clients such as "ncftp" and "mirror" assume
```

lucas@lucas-vmwarevirtualplatform: ~

ArquivoAçõesEditarExibirAjuda

lucas@lucas-vmwarevirtualplatform: ~

GNU nano 6.2/etc/vsftpd.conf

```
# This option specifies the location of the RSA certificate to use for SSL
# encrypted connections.
#rsa_cert_file=/etc/ssl/certs/ssl-cert-snakeoil.pem
#rsa_private_key_file=/etc/ssl/private/ssl-cert-snakeoil.key

rsa_cert_file=/etc/ssl/private/vsftpd.pem
rsa_private_key_file=/etc/ssl/private/vsftpd.pem

ssl_enable=YES

allow_anon_ssl=NO
force_local_data_ssl=YES
force_local_logins_ssl=YES

ssl_tlsv1=YES
ssl_sslv2=NO
ssl_sslv3=NO

require_ssl_reuse=NO
ssl_ciphers=HIGH

#
# Uncomment this to indicate that vsftpd use a utf8 filesystem.
#utf8_filesystem=YES

user_sub_token=$USER
local_root=/home/$USER/ftp

pasv_min_port=40000
pasv_max_port=50000

userlist_enable=YES
userlist_file=/etc/vsftpd.userlist
userlist_deny=NO
```

^G Ajuda

^X Sair

^O Gravar

^R Ler o arq

^W Onde está?

^\_ Substituir

^K Recortar

^U Colar

^T Executar

^J Justificar

```
lucas@lucas-vmwarevirtualplatform: ~  
Arquivo  Ações  Editar  Exibir  Ajuda  
lucas@lucas-vmwarevirtualplatform: ~  
lucas@lucas-vmwarevirtualplatform:~$ sudo ufw status  
Estado: inativo  
lucas@lucas-vmwarevirtualplatform:~$ sudo adduser alex  
Adicionando o usuário 'alex' ...  
Adicionando novo grupo 'alex' (1001) ...  
Adicionando novo usuário 'alex' (1001) ao grupo 'alex' ...  
Criando diretório pessoal '/home/alex' ...  
Copiando arquivos de '/etc/skel' ...  
Nova senha:  
Redigite a nova senha:  
passwd: senha atualizada com sucesso  
Modificando as informações de usuário para alex  
Informe o novo valor ou pressione ENTER para aceitar o padrão  
Nome Completo []: alex  
Número da Sala []: 123  
Fone de Trabalho []: 123  
Fone Residencial []: 123  
Outro []: 123  
A informação está correta? [S/n] S  
lucas@lucas-vmwarevirtualplatform:~$ sudo mkdir /home/alex/ftp  
lucas@lucas-vmwarevirtualplatform:~$ sudo chown nobody:nogroup /home/alex/ftp  
lucas@lucas-vmwarevirtualplatform:~$ sudo chmod a-w /home/alex/ftp  
lucas@lucas-vmwarevirtualplatform:~$ sudo ls -la /home/alex/ftp  
total 8  
dr-xr-xr-x 2 nobody nogroup 4096 abr 22 07:45 .  
drwxr-x--- 3 alex alex 4096 abr 22 07:45 ..  
lucas@lucas-vmwarevirtualplatform:~$ sudo mkdir /home/alex/ftp/files  
lucas@lucas-vmwarevirtualplatform:~$ sudo chown alex:alex /home/alex/ftp/files  
lucas@lucas-vmwarevirtualplatform:~$ echo "vsftpd sample file" | sudo tee /home/alex/ftp/files/sample.txt  
vsftpd sample file  
lucas@lucas-vmwarevirtualplatform:~$ sudo nano /etc/vsftpd.conf  
lucas@lucas-vmwarevirtualplatform:~$ echo "alex" | sudo tee -a /etc/vsftpd.userlist  
erlist  
alex  
lucas@lucas-vmwarevirtualplatform:~$ cat /etc/vsftpd.userlist  
alex  
lucas@lucas-vmwarevirtualplatform:~$ sudo systemctl restart vsftpd
```

## 4 – Criando um FTP seguro

[illegible]

```
lucas@lucas-vmwarevirtualplatform: ~
Arquivo  Ações  Editar  Exibir  Ajuda

lucas@lucas-vmwarevirtualplatform: ~
+++++*.....+.....+.....+.....+.....+.....+.....+.....+.....+
+++++*.....+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.
.....+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.
.....+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.
.....+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.
.....+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.
.....+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.
.....+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.
.....+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.
.....+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.
.....+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.
.....+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.
.....+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.
.....+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.+.
+++++
-----
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
-----
Country Name (2 letter code) [AU]:BR
State or Province Name (full name) [Some-State]:lucas dos santos silva
Locality Name (eg, city) []:caucaia
Organization Name (eg, company) [Internet Widgits Pty Ltd]:lucas
Organizational Unit Name (eg, section) []:lucas
Common Name (e.g. server FQDN or YOUR name) []:lucas
Email Address []:lukasantosilva@yahoo.com.br
lucas@lucas-vmwarevirtualplatform:~$ sudo nano /etc/vsftpd.conf
lucas@lucas-vmwarevirtualplatform:~$ sudo systemctl restart vsftpd
```

## 5 – Testando conexões com FileZilla

```
lucas@lucas-vmwarevirtualplatform: ~  
Arquivo  Ações  Editar  Exibir  Ajuda  
lucas@lucas-vmwarevirtualplatform: ~  
lucas@lucas-vmwarevirtualplatform:~$ sudo apt-get install filezilla  
[sudo] senha para lucas:  
  
Sinto muito, tente novamente.  
[sudo] senha para lucas:  
12Sinto muito, tente novamente.  
[sudo] senha para lucas:  
Lendo listas de pacotes... Pronto  
Construindo árvore de dependências... Pronto  
Lendo informação de estado... Pronto  
Os pacotes adicionais seguintes serão instalados:  
  filezilla-common libfilezilla-common libfilezilla24 libpugixml1v5  
  libwxbase3.0-0v5 libwxgtk3.0-gtk3-0v5  
Os NOVOS pacotes a seguir serão instalados:  
  filezilla filezilla-common libfilezilla-common libfilezilla24  
  libpugixml1v5 libwxbase3.0-0v5 libwxgtk3.0-gtk3-0v5  
0 pacotes atualizados, 7 pacotes novos instalados, 0 a serem removidos e 131
```

