



## ColossusXT Linux / VPS Wallet 1.0.3 Setup Guide

### SECURITY WARNING

Please use common sense and security best practices when working with other people to help configure and troubleshoot your wallet! Scammers often pose as team members or "tech support". All official ColossusXT team members have custom colored names in the ColossusXT Discord.

Never share your keys, passwords, or wallet files with anyone.

Never install third-party software or allow people to remotely control or view your system.

Remember, where there is money there are thieves!

This is a living document. The most current version can be found [here](#).

Before we begin, if you're new to Linux, it's recommended that you become familiar with the basic commands. [Here is a good cheat sheet](#) to get you started.

First, a few quick bits of information you'll need for this guide:

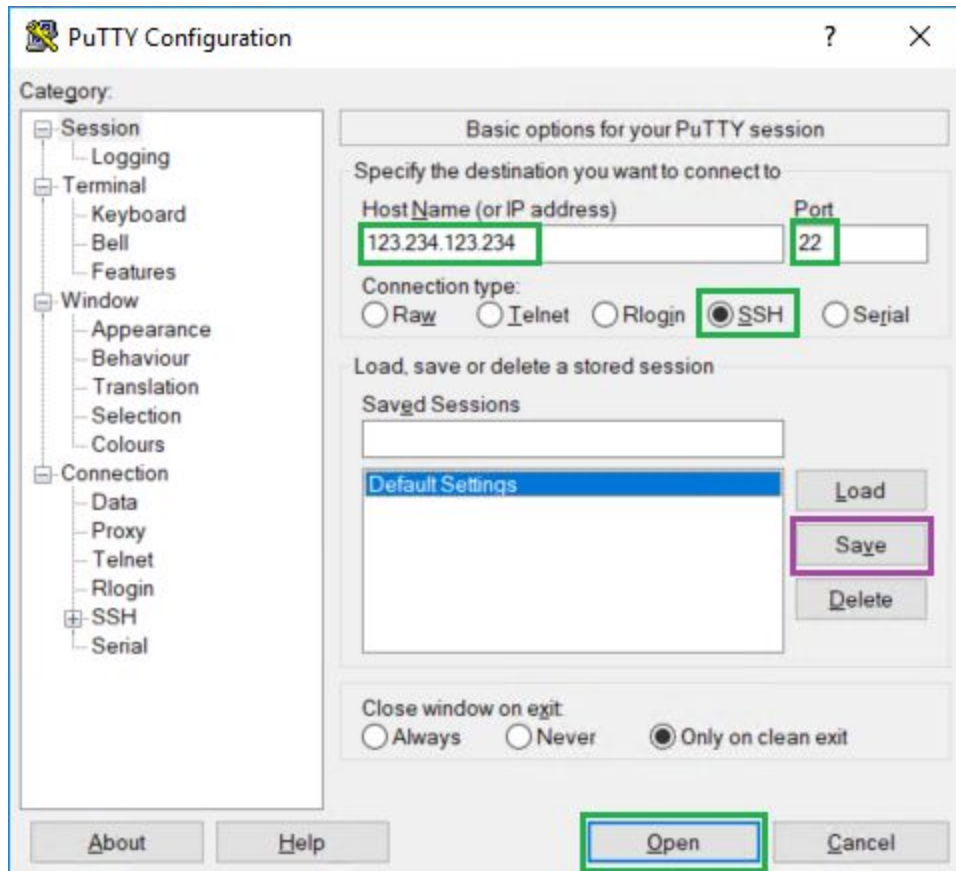
- 1) All Linux commands are **CASE SENSITIVE**. ALWAYS pay close attention to case.

- 2) The `~` symbol is a shortcut to the current user's home folder, which is `/root` for the `root` login, and `/home/username` for any other user's login. You will see this very often. It is not a random squiggly mark; it has a specific and important meaning.
- 3) Just like on Windows and OSX, the Linux COLX *program* folder (`~/colx-1.0.3`) will be different than the COLX *wallet* folder (`~/.ColossusCoinXT`). The program folder contains the executable application files, while the wallet folder contains your `wallet.dat` file and your local copy of the COLX blockchain database.

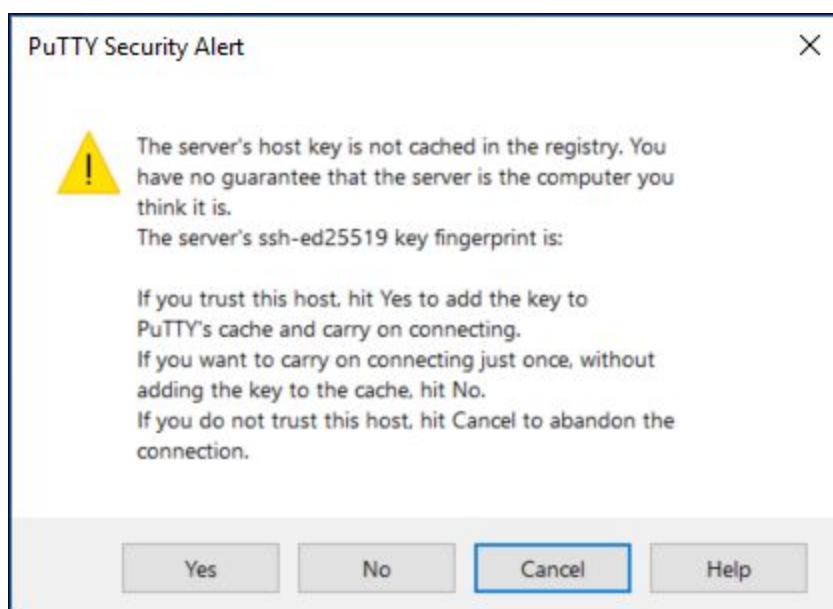
## Connecting To Linux / VPS

Most VPS services come with a web-based console that lets you connect to your VPS without installing any additional software. However, many users prefer to install third-party software to connect to their VPS remotely.

For Windows, the most common Windows software to connect to a VPS is PuTTY. It is available for download [here](#). Download and run the MSI installer, then run the PuTTY application. Enter the IP of your VPS, select port 22 and SSH, and click Open. You can also optionally click Save on this screen so that your Putty application will automatically open with these settings in the future.



The first time you connect with Putty, you will receive a Security Alert. Click Yes to this alert to continue to a login prompt.



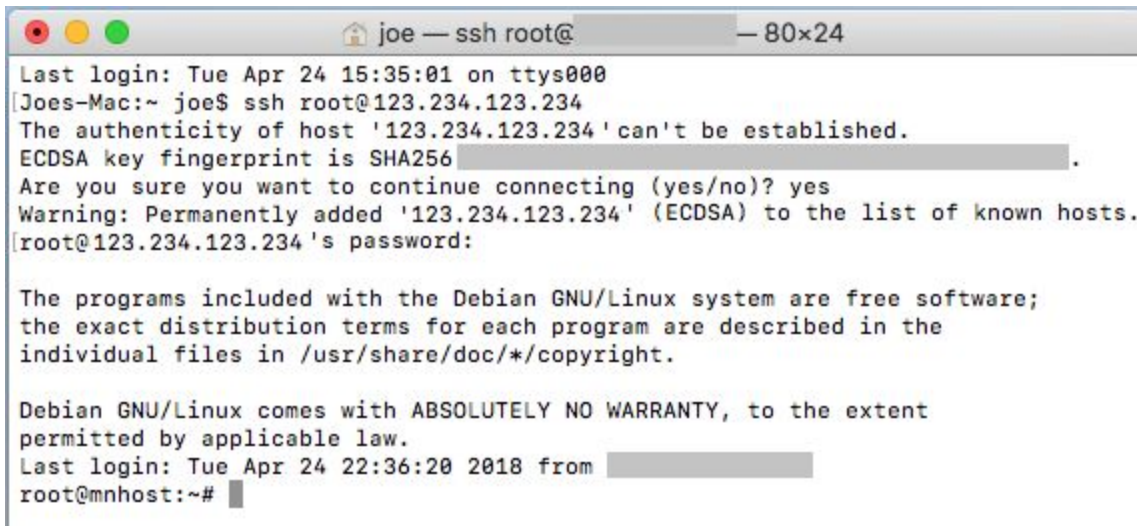
Enter the your login credentials to log in. No characters will be displayed while you enter your password.

**PuTTY Usage Note:** To copy-paste into the PuTTY window, copy the text you wish to paste, then right-click in the PuTTY window. The text will be pasted at the location of your text cursor.

For OSX, a Terminal application is already built in and there is no need to install additional software like PuTTY. On OSX, Search for the "Terminal" application in Spotlight search or your applications menu. Use the `ssh` command along with your username and IP address to log in to your system:

```
ssh username@123.234.123.234
```

You will see a similar one-time security warning. Type "yes" to continue:

A screenshot of a macOS Terminal window titled "joe — ssh root@ — 80x24". The terminal shows the output of an SSH command. It starts with "Last login: Tue Apr 24 15:35:01 on ttys000". Then, the prompt "[Joes-Mac:~ joe\$ ssh root@123.234.123.234]" is shown. The terminal displays a warning: "The authenticity of host '123.234.123.234' can't be established. ECDSA key fingerprint is SHA256 [redacted]". It then asks "Are you sure you want to continue connecting (yes/no)? yes". A warning follows: "Warning: Permanently added '123.234.123.234' (ECDSA) to the list of known hosts." The prompt "[root@123.234.123.234's password:" is shown. Below this, a message states: "The programs included with the Debian GNU/Linux system are free software; the exact distribution terms for each program are described in the individual files in /usr/share/doc/\*/copyright." Another message says: "Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent permitted by applicable law." The final line shows "Last login: Tue Apr 24 22:36:20 2018 from [redacted]" and the prompt "root@mnhost:~#".

```
joe — ssh root@ — 80x24
Last login: Tue Apr 24 15:35:01 on ttys000
[Joes-Mac:~ joe$ ssh root@123.234.123.234
The authenticity of host '123.234.123.234' can't be established.
ECDSA key fingerprint is SHA256 [redacted] .
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '123.234.123.234' (ECDSA) to the list of known hosts.
[root@123.234.123.234's password:
The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Tue Apr 24 22:36:20 2018 from [redacted]
root@mnhost:~#
```

Use the above `ssh` command to connect from your Linux terminal as well.

## Linux / VPS Password Security

Use a long, strong, and unique password. Your password should be at least 20 characters. Your password should not be in any dictionary. It should contain uppercase and lowercase letters, numbers, special characters, etc. Don't use

obvious substitutions like 0 for O or 5 for S. Don't use a password that you use anywhere else, or even a password *similar* to one you use elsewhere.

To change your password, use the `passwd` command after logging in.

## Linux / VPS Additional Security Options

Because Linux / VPS systems are generally always online, some users opt to take additional security precautions to protect their system from attacks and intrusion. If you're using your Linux wallet to hold and stake coins, here are some optional security steps you can consider taking to improve the security of your wallet:

Disable `root` Login: Some users choose to disable SSH login for the default `root` account, and create a new account for SSH access. [Here](#) is a good guide on setting this up.

If you disable `root` login, you will need to become familiar with the `sudo` command, which allows you to run commands as `root` while logged in as another user. You will need to use this for any command that affects the system as a whole and requires `root` access. For example, when logged in as `newuser`, you won't need to use `sudo` to do things like change directories (`cd`), list files (`ls`), download files (`wget`), or launch ColossusXT apps (`./colxd`). However, to reboot (`reboot`) or change firewall settings (`ufw`), you'd need to use `sudo reboot` or `sudo ufw`.

This guide is written with the assumption that you are logged in as `root`.

Install a Firewall: A good option to protect your system from attacks including Denial of Service (DoS) is to install a firewall. The most common one for Linux is Uncomplicated Firewall, or `ufw`. In fact, depending on which Linux distribution you choose to use, this may already be installed.

To check if `ufw` is installed, type `ufw status` at the command prompt. If it says "command not found", it's not installed yet.

If `ufw` isn't installed, use the command `apt-get install ufw` to install it. Remember, if you disabled `root` SSH login and are logged in as a different user, you'll need to include the `sudo` command (`sudo apt-get install ufw`).

Once `ufw` is installed, configure it with the following commands:

```
ufw allow 51572/tcp (to open the port used by your server wallet)
ufw allow 51573/tcp (to open the RPC port used by your server wallet)
```

```
ufw allow ssh          (to allow SSH login and prevent locking yourself out!)
ufw enable              (to enable the firewall)
```

If you're having network connectivity issues and want to check if the firewall is the problem, you can use the command `ufw disable` to see if that fixes your problem.

For more information, a good starter guide to `ufw` can be found [here](#).

## Back Up Wallet

The new wallet program is built to use existing `wallet.dat` files, however, any time is a good time to back up your wallet! If this is an update from a previous version and not a new installation, back up your wallet file to a secure location before proceeding. The standard location of the wallet file is

`~/.ColossusCointXT/wallet.dat`. Copy this to another location, preferably on another machine.

For more details on backing up your `wallet.dat`, see the section "Backing Up Your New Wallet" near the end of this document.

## Stop Any Existing COLX Processes

If this is an update rather than a new installation, be sure to stop any existing ColossusXT processes. Navigate to your existing ColossusXT program folder and use this command

```
./colx-cli stop
```

## Download The 1.0.3 ColossusXT Wallet Program From Github:

Use the `wget` command to download the 1.0.3 wallet directly to your `~/Downloads` directory.

**NOTE:** There are different versions available for each system architecture. If you don't know your architecture, use the `arch` command:

```
user@ubuntu:~$ arch
i686
user@ubuntu:~$
```

Use only the command that matches your system architecture:

### **x86\_64**

```
wget -P ~/Downloads
https://github.com/ColossusCoinXT/ColossusCoinXT/releases/download/v1
.0.3/colx-1.0.3-x86_64-linux-gnu.tar.gz
```

### **i686**

```
wget -P ~/Downloads
https://github.com/ColossusCoinXT/ColossusCoinXT/releases/download/v1
.0.3/colx-1.0.3-i686-pc-linux-gnu.tar.gz
```

### **ARM**

```
wget -P ~/Downloads
https://github.com/ColossusCoinXT/ColossusCoinXT/releases/download/v1
.0.3/colx-1.0.3-arm-linux-gnueabi.tar.gz
```

## **Extract The Wallet Archive To Your Home Folder**

Now use the `tar` command to extract the archive to a new COLX folder located at `~/colx-1.0.3`. Again, use only the command that matches your system architecture:

### **x86\_64**

```
tar xvzf ~/Downloads/colx-1.0.3-x86_64-linux-gnu.tar.gz -C ~
```

### **i686**

```
tar xvzf ~/Downloads/colx-1.0.3-i686-pc-linux-gnu.tar.gz -C ~
```

### **ARM**

```
tar xvzf ~/Downloads/colx-1.0.3-arm-linux-gnueabi.tar.gz -C ~
```

**NOTE:** If you download and install the wallet for the wrong architecture, you will see an error like this when you attempt to launch the wallet:



```
user@ubuntu:~/a/colx-1.0.3/bin$ ./colxd
bash: ./colxd: cannot execute binary file: Exec format error
user@ubuntu:~/a/colx-1.0.3/bin$
```

## Launch The COLX Wallet Application

Use the `cd` command to navigate to your ColossusXT program folder:

```
cd ~/colx-1.0.3/bin
```

Next, launch the ColossusXT wallet application in daemon mode.

**NOTE:** About “daemon”. This switch tells the system to start ColossusXT as a background process and return you to the command prompt. If you don’t use this switch (and don’t have “daemon=1” in your ColossusCoinXT.conf), you will not be returned to the command prompt until you stop the ColossusXT server process by pressing [CTRL]+Z.

**ALSO NOTE:** There are **TWO** dashes, not one, and the spelling is **daemon**, not **deamon**!

```
./colxd --daemon
```

If this is an update rather than a new installation, you’re done! You can check the status of your wallet using this command:

```
./colx-cli getinfo
```

For new installations, there are additional steps. Since you haven’t edited your config file yet, you will likely get the following error:

```
user@ubuntu:~/colx-1.0.3/bin$ ./colxd
Error: To use colxd, or the -server option to colx-qt, you must set an rpcpassword in the configuration file:
/home/user/.ColossusCoinXT/ColossusCoinXT.conf
It is recommended you use the following random password:
rpcuser=colxrpc
rpcpassword=9GZgz8RNDyRXQ4iG7gKegAWTfHj4mr8MCJeLWv7PhEiq
(you do not need to remember this password)
The username and password MUST NOT be the same.
If the file does not exist, create it with owner-readable-only file permission
It is also recommended to set alertnotify so you are notified of problems;
for example: alertnotify=echo %s | mail -s "COLX Alert" admin@foo.com
```



It may seem pointless running the app when we know we'll get this error, but this is actually an important step: The first time you run the application, it automatically creates your wallet file and configuration files. Now that the configuration file has been created, we can edit it.

## **Edit ColossusCoinXT.conf**

There are many text-based text editors for Linux. In this example we'll use `pico`. Use this CASE-SENSITIVE command to open your `ColossusCoinXT.conf` file in the `pico` editor:

```
pico ~/.ColossusCoinXT/ColossusCoinXT.conf
```

This will open your config file in the text editor.

NOTE: For the two "rpc" entries, make up your own random letters and numbers (This entry is no longer used but is still required by the application. This will be fixed in a future update.).

Add the following lines to your config file.

```
rpcuser=sdfhsdfh249h294h2
rpcpassword=rsdfsfoty24tsdhfgsh
daemon=1
staking=1
addnode=seed.colossusxt.org
addnode=seed.colossuscoinxt.org
addnode=seed.colxt.net
```

```
user@ubuntu: ~/colx-1.0.3/bin
GNU nano 2.5.3 File: ...me/user/.ColossusCoinXT/ColossusCoinXT.conf Modified

rpcuser=sdfhskejrhskjh
rpcpassword=rioty24tsdhfgsh
daemon=1
staking=1
addnode=seed.colossusxt.org
addnode=seed.colossuscoinxt.org
addnode=seed.colxt.net

[Cancelled]
^G Get Help  ^O Write Out  ^W Where Is  ^K Cut Text  ^J Justify    ^C Cur Pos
^X Exit      ^R Read File  ^\ Replace   ^U Uncut Text ^T To Spell   ^_ Go To Line
```

When you are done, press [CTRL]+X to exit.

Press y to the "Save modified buffer?" prompt:

```
Save modified buffer (ANSWERING "No" WILL DESTROY CHANGES) ?
Y Yes
N No          ^C Cancel
```

Then press [Enter] to retain the original filename and exit:

```
File Name to Write: /home/user/.ColossusCoinXT/ColossusCoinXT.conf
^G Get Help  M-D DOS Format  M-A Append     M-B Backup File
^C Cancel    M-M Mac Format  M-P Prepend    ^T To Files
```

The file will save, the editor will exit, and you will be returned to the command prompt.

Now that the config file has been updated, restart your ColossusXT wallet application. Because `daemon=1` was added to the `ColossusCoinXT.conf` file, we no

longer need to use the `--daemon` switch to be immediately returned to the command prompt:

```
./colxd
```

The console should now indicate that the server is starting:

```
user@ubuntu:~/colx-1.0.3/bin$ ./colxd
ColossusCoinXT server starting
user@ubuntu:~/colx-1.0.3/bin$
```

Now check the wallet status :

```
./colx-cli getinfo
```

```
user@ubuntu:~/colx-1.0.3/bin$ ./colx-cli getinfo
{
  "version" : 1000300,
  "protocolversion" : 70810,
  "walletversion" : 61000,
  "balance" : 0.00000000,
  "obfuscation_balance" : 0.00000000,
  "blocks" : 23709,
  "timeoffset" : 0,
  "connections" : 16,
  "proxy" : "",
  "difficulty" : 11011.55216442,
  "testnet" : false,
  "keypoololdest" : 1524599769,
  "keypoolsize" : 1001,
  "paytxfee" : 0.00000000,
  "relayfee" : 10.00000000,
  "staking status" : "Staking Not Active",
  "errors" : ""
}
user@ubuntu:~/colx-1.0.3/bin$
```

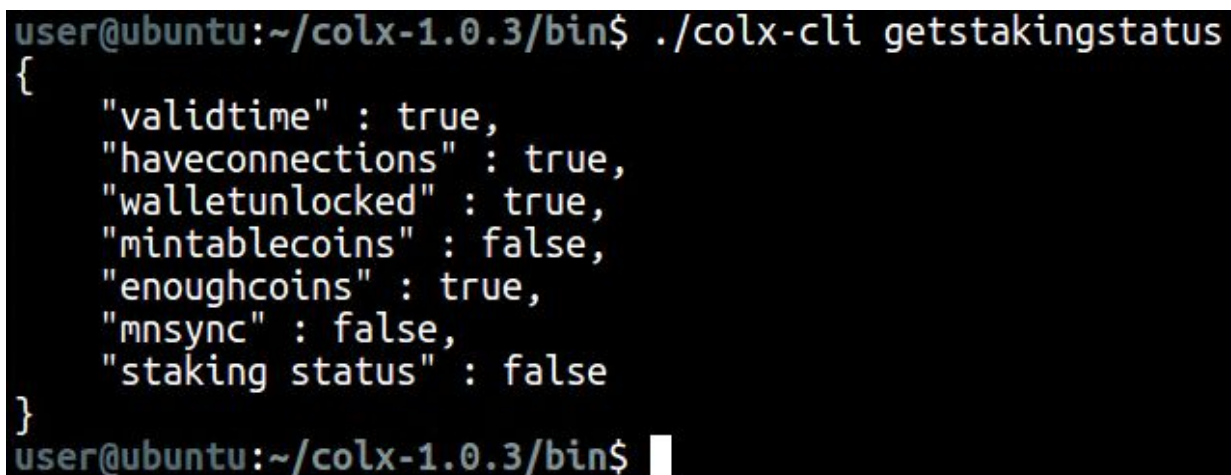
First, check the first line for a version number of 1000300 to verify that you're now using the 1.0.3 wallet.

Your wallet will now begin to download the COLX blockchain. If you wait a few seconds and repeat the command, you should see that the number of blocks has increased. You can monitor this number to track your process as the block number increases toward the current block number which can be found at the [COLX Blockchain Explorer](#).

## Additional Commands For Staking

The `colx-cli` command is the command line version of the debug console built into the Windows and OSX wallets. Any command you're familiar with in the debug console will also work here. For example you can use the `getstakingstatus` command:

```
./colx-cli getstakingstatus
```

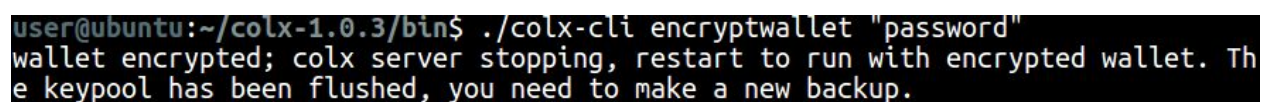
A terminal window with a black background and green text. The prompt is 'user@ubuntu:~/colx-1.0.3/bin\$'. The command entered is './colx-cli getstakingstatus'. The output is a JSON object: { "validtime" : true, "haveconnections" : true, "walletunlocked" : true, "mintablecoins" : false, "enoughcoins" : true, "mnsync" : false, "staking status" : false }. The prompt is repeated at the bottom: 'user@ubuntu:~/colx-1.0.3/bin\$' followed by a cursor.

```
user@ubuntu:~/colx-1.0.3/bin$ ./colx-cli getstakingstatus
{
  "validtime" : true,
  "haveconnections" : true,
  "walletunlocked" : true,
  "mintablecoins" : false,
  "enoughcoins" : true,
  "mnsync" : false,
  "staking status" : false
}
user@ubuntu:~/colx-1.0.3/bin$
```

In this case, staking status is `false` because it's still not synchronized, there are no mature coins, and the wallet hasn't been encrypted yet.

Before you can stake, you'll need to encrypt your wallet with the following command:

```
./colx-cli encryptwallet "password"
```

A terminal window with a black background and green text. The prompt is 'user@ubuntu:~/colx-1.0.3/bin\$'. The command entered is './colx-cli encryptwallet "password"'. The output is: 'wallet encrypted; colx server stopping, restart to run with encrypted wallet. The keypool has been flushed, you need to make a new backup.'.

```
user@ubuntu:~/colx-1.0.3/bin$ ./colx-cli encryptwallet "password"
wallet encrypted; colx server stopping, restart to run with encrypted wallet. The
keypool has been flushed, you need to make a new backup.
```

After encrypting, the wallet application will close. You'll need to restart it:

```
./colxd
```

Just like on Windows and OSX, the wallet application always launches with the wallet locked, so you'll need to unlock it before you can stake:

```
./colx-cli walletpassphrase "password" 0 true
```

## Backing Up Your New Wallet

After you encrypt your wallet, a new kepool is generated, so you should back it up before sending COLX to any new addresses. The easiest way to back up your wallet.dat from a remote Linux / VPS system is via a secure FTP program such as [WinSCP](#). Install WinSCP from the link provided, then connect using your IP address, login and password. Click "Yes" on the one-time warning to accept the server's host key.

Once connected, you will need to press [CTRL]+[ALT]+H to enable viewing hidden files. Navigate to your remote ColossusXT directory (~/.ColossusCoinXT) and drag the wallet.dat to your desired destination on your local file system.

## Additional Wallet Commands

The following commands are good to know for standard use of the ColossusXT wallet.

`./colx-cli getnewaddress "Your New Address Name"` to generate a new COLX address in this wallet.

`./colx-cli sendtoaddress "address" amount` to send COLX from your wallet to another address.

`./colx-cli help` to display a complete list of commands.

`./colx-cli help | more` to get a complete list of commands and view it one page at a time.

## **Desktop Linux**

If you're using a graphical desktop version of Linux, you can also use the Linux GUI-based COLX wallet application. Be sure to stop your text-based wallet application first:

```
./colx-cli stop
```

Then start the GUI-based wallet by typing:

```
./colx-qt
```

## **Additional Resources**

As always, if you have any questions, please come find us in the #general-support channel of the ColossusXT discord:

<https://discord.gg/aHJKFaX>