

Working from home, using Android

Introduction

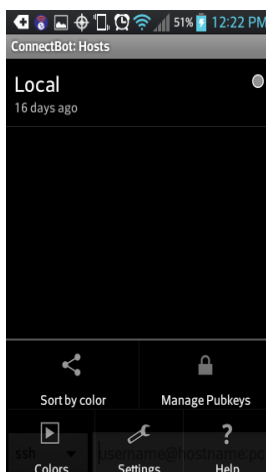
Fun fact: It is possible to remotely log in to the CS department's Linux machines from anywhere, using a system called ssh. This means that, using only your ingenuity and the technology at your disposal, you can log into one of the Sun Lab machines and run commands in the shell from your phone or tablet anywhere!

Why would I want to do that? Well, it's pretty cool. And although coding without a keyboard is hard, you can make small edits (using vim) and resubmit homework without ever coming to the CIT. All you have to do is follow these slightly complicated instructions.

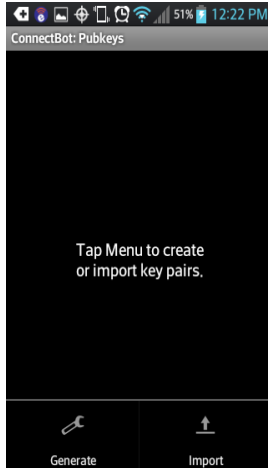
Let's get started.

1 On your Android: Create a key

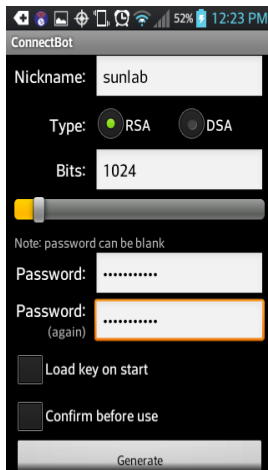
1. Download ConnectBot and ES File Explorer (or any other file manager) from Google Play.
2. Open ConnectBot and touch the menu button on your device. Choose Manage Pubkeys.



3. Hit Menu again and tap Generate.

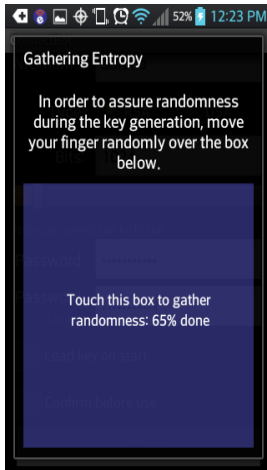


4. Choose a nickname for your key and keep the default settings (RSA, 1024 bits).

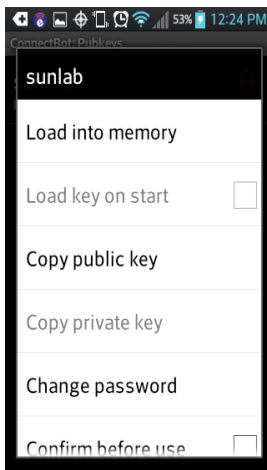


5. There is an option for a password. It is optional, but *highly* recommended, because it protects your key in the event it is compromised (for example, if your phone is stolen). Choose a long and strong password. You will have to enter it twice.

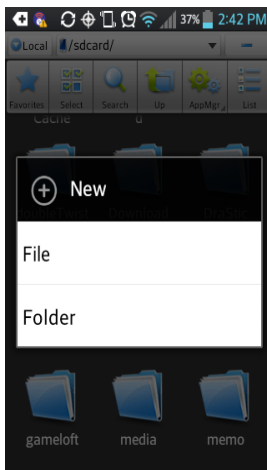
6. Follow the on-screen minigame.



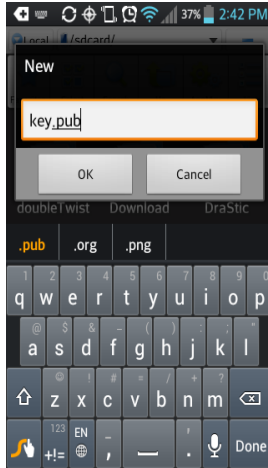
7. After the key is created, tap and hold on its name and tap Copy public key.



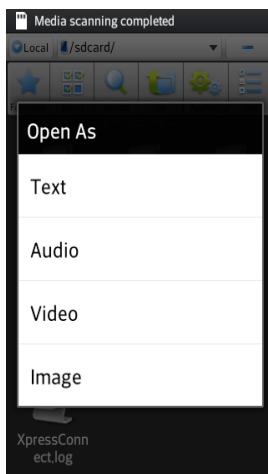
8. Go to ES File Manager and tap the menu key. Select New, and then File.



9. Write key.pub and tap OK.



10. Tap on the file you just created, and when prompted select Text.

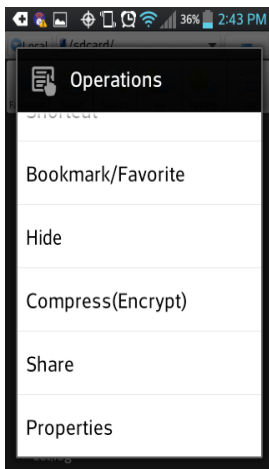


11. Choose default ES Note Editor.

12. Tap and hold on empty space and select paste.



13. Hit the menu key and select Save.
14. Go back and tap and hold on the file.
15. Select Share to email the key to yourself or plug in your phone to your laptop to get the .pub file.



16. Your goal is to copy this file to a department machine.

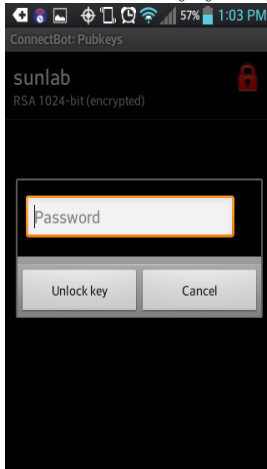
2 In the Sunlab: Authorize your key

1. If you emailed your public key file to yourself, download and save it in your home directory (e.g. /home/jcarberr).
2. Open a terminal.
3. Type the following command and press return: `ssh-key-setup <key>` (where key is the name of the public key file that you copied from your Mac).

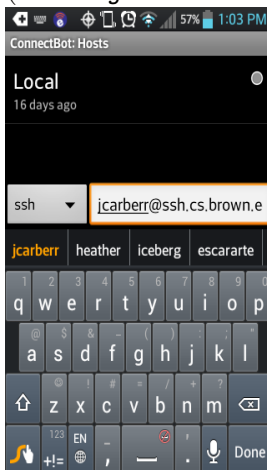
Good work so far. Isn't this fun?

3 Back on your Anroid Device: Connecting

1. Open ConnectBot, as before.
2. Hit the menu key and go to ManagePubkeys
3. Select the key you generated, and if the lock is red, unlock the key by tapping it.



4. You will be prompted to enter the password that you chose when generating the key.
5. Go back to main screen.
6. Select ssh and type Type the following on the box and press done: `jcarberr@ssh.cs.brown.edu` (where `jcarberr` is your CS login name).



7. Select the connection you just created.

8. If it asks for confirmation, just hit OK or Coninue. You will be connected to a terminal in one of the Sublab computers. You can use it as if you were sitting in the Sunlab.
9. For keyboard shortcuts view online documentation.