

How to use Local Docker as SSH Host in Clion

1. Create the container as follows

```
tony@MOSS02:~/projects/temp/CANDY/docker$ sudo bash start.sh
Removing network docker_default
Building candy
[+] Building 554.9s (11/11) FINISHED                                docker:default
=> [internal] load build definition from Dockerfile                0.0s
=> => transferring dockerfile: 1.22kB                               0.0s
=> [internal] load metadata for docker.io/nvidia/cuda:11.7.1-cudnn8-devel-ubuntu22.04 2.1s
=> [internal] load .dockerignore                                  0.0s
=> => transferring context: 2B                                       0.0s
=> CACHED [1/7] FROM docker.io/nvidia/cuda:11.7.1-cudnn8-devel-ubuntu22.04 0.0s
```

If you go to play War thunder and go back in 20 minutes, you should see this

```
=> => writing image sha256:efc8241e01aa2a22b06fd347d953ac70e74a3f3227040 0.0s
=> => naming to docker.io/library/docker_candy 0.0s

1 warning found (use docker --debug to expand):
- SecretsUsedInArgOrEnv: Do not use ARG or ENV instructions for sensitive data
(ENV "PASSWD") (line 4)
Creating network "docker_default" with the default driver
Creating docker_candy_1 ... done
Docker container is running. You can connect via SSH with:
ssh root@<remote_server_ip> -p 2222
```

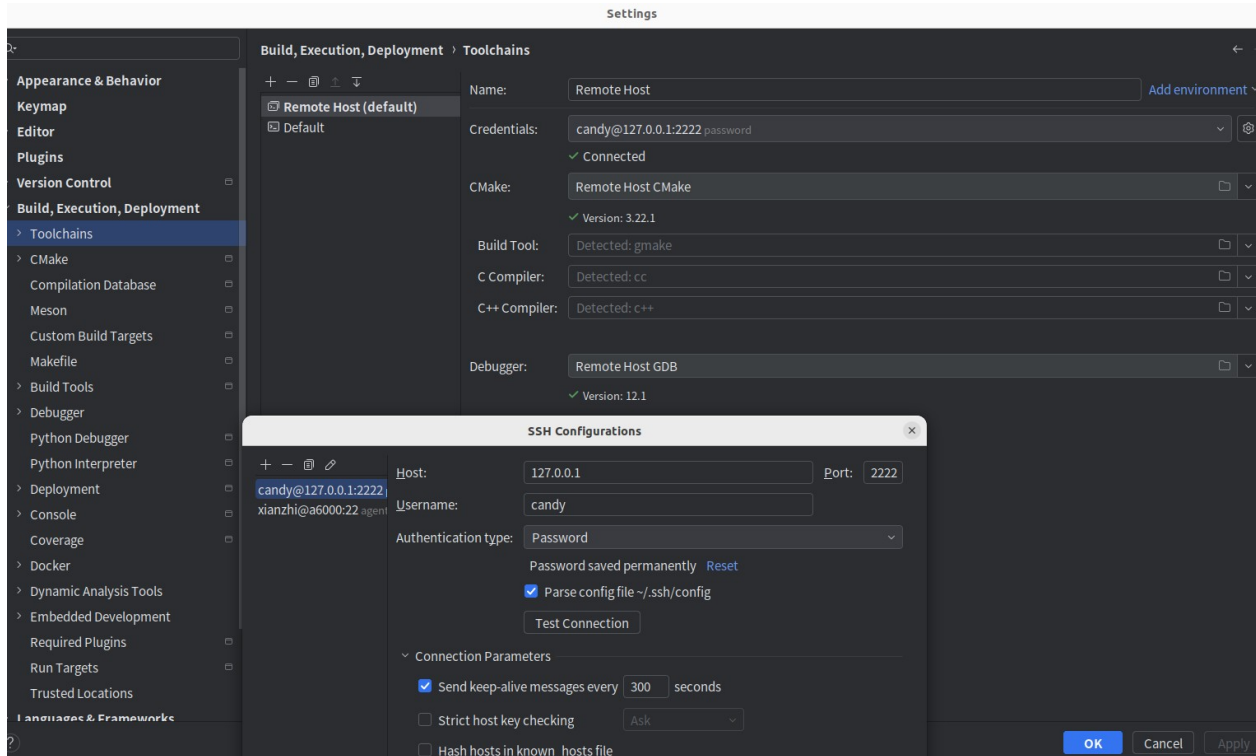
Then do something like this

```
Creating network "docker_default" with the default driver
Creating docker_candy_1 ... done
Docker container is running. You can connect via SSH with:
ssh root@<remote_server_ip> -p 2222
root@313388752f9a:/workspace# tony@MOSS02:~/projects/temp/CANDY/docker$ sudo bas
docker image rm docker_candy^C
tony@MOSS02:~/projects/temp/CANDY/docker$ ssh candy@127.0.0.1
ssh: connect to host 127.0.0.1 port 22: Connection refused
tony@MOSS02:~/projects/temp/CANDY/docker$ ssh candy@127.0.0.1 -p 2222
candy@127.0.0.1's password:
Welcome to Ubuntu 22.04.3 LTS (GNU/Linux 6.8.0-45-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

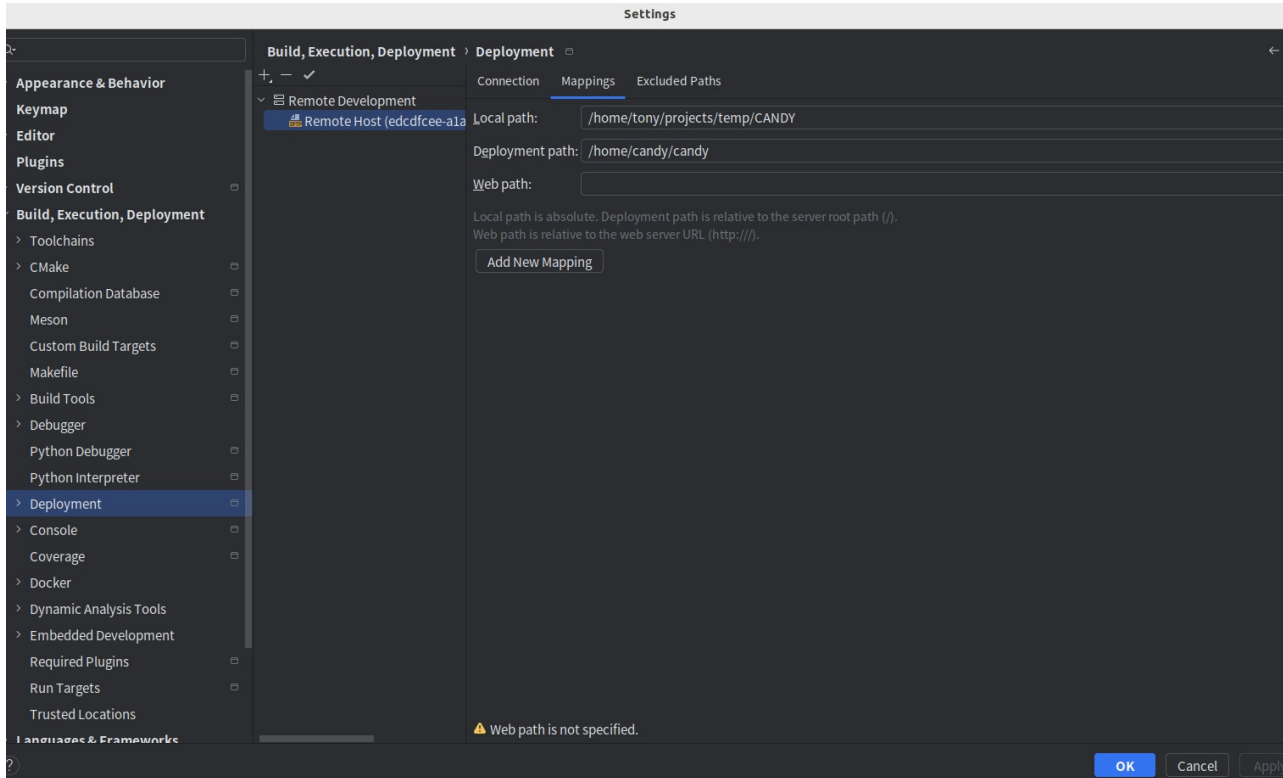
This system has been minimized by removing packages and content that are
not required on a system that users do not log into.
```

2. Go to Clion, add the host

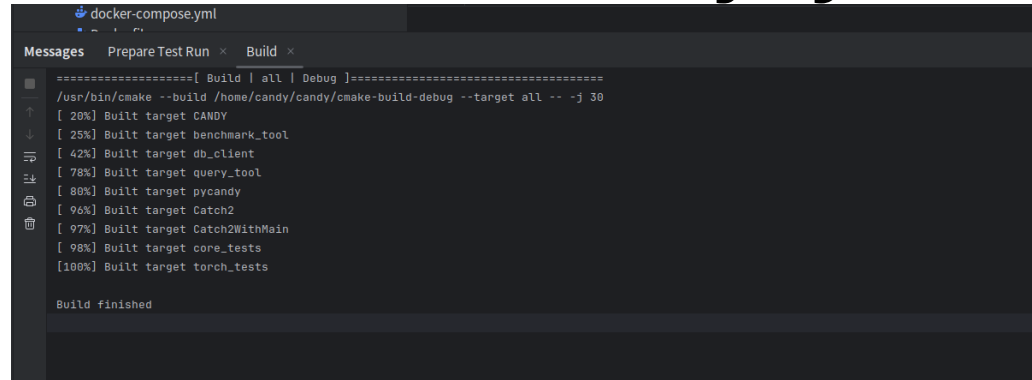


Do change the port
into 2222!

3. Change the mapping



4. Restart Clion, force cmake to refresh, and enjoy!



A screenshot of the Clion IDE interface. The top bar shows the file 'docker-compose.yml' is open. Below it, the 'Messages' panel is active, displaying the output of a CMake build. The build process is titled '[Build | all | Debug]' and shows progress for various targets: CANDY (20%), benchmark_tool (25%), db_client (42%), query_tool (78%), pycandy (80%), Catch2 (96%), Catch2WithMain (97%), core_tests (98%), and torch_tests (100%). The build is finished.

```
===== [ Build | all | Debug ] =====  
/usr/bin/cmake --build /home/candy/candy/cmake-build-debug --target all -- -j 30  
[ 20%] Built target CANDY  
[ 25%] Built target benchmark_tool  
[ 42%] Built target db_client  
[ 78%] Built target query_tool  
[ 80%] Built target pycandy  
[ 96%] Built target Catch2  
[ 97%] Built target Catch2WithMain  
[ 98%] Built target core_tests  
[100%] Built target torch_tests  
  
Build finished
```

```
README.md      commit.sh  docs          test  
$ ls /home/candy/candy  
CANDY.cbp      apps      commit.sh     docs          test  
CMakeLists.txt build     commit_info   include  
LICENSE        cmake     detect_cuda_arch.py python_bindings  
README.md      cmake-build-debug docker         src  
$
```