COMMCARE HQ **Setup instructions**

* Ubuntu server Version 14.04
* Install Ubuntu server
* Install desktop

Sudo apt-get install –no-install-recommends Ubuntu-desktop

**Install google chrome**

**Install Dependencies by using following commands:**

**Run all these commands one by one**

sudo apt-get install nodejs npm

sudo npm install less uglify-js -g

sudo apt-get install -y curl python-pip python-dev libevent-1.4-2 libevent-dev python-setuptools build-essential

sudo apt-get install -y postgresql memcached

sudo apt-get build-dep -y python-psycopg2 python-lxml

sudo pip install --upgrade pip

sudo pip install virtualenv virtualenvwrapper

grep virtualenvwrapper ~/.bashrc

echo "source /usr/local/bin/virtualenvwrapper.sh" >> ~/.bashrc

source ~/.bashrc

sudo apt-get install git

sudo apt-get install redis-server

sudo apt-get install gdebi

mkvirtualenv cchq

sudo apt-get install rabbitmq-server \

libpq-dev \

libffi-dev \

libfreetype6-dev \

libjpeg-dev \

libtiff-dev \

libwebp-dev \

libxml2-dev \

libxslt-dev \

python-dev

git clone https://github.com/dimagi/commcare-hq.git

cd commcare-hq

chmod +x install.sh

./install.sh

workon cchq

git submodule update --init --recursive

pip install -r requirements/requirements.txt -r requirements/prod-requirements.txt

cp localsettings.example.py localsettings.py

pip install -r requirements/dev-requirements.txt

Enter localsettings.py and do the following: - Find the LOG\_FILE and DJANGO\_LOG\_FILE entries. Ensure that the directories for both exist and are writeable. If they do not exist, create them. - You may also want to add the line from dev\_settings import \* at the top of the file, which includes some useful default settings.

**Now Install docker**

1. sudo apt-get **update**
2. $ sudo apt-**get** **install** apt-transport-https ca-certificates

Add the new GPG key.

$ sudo apt-key adv --keyserver hkp://p80.pool.sks-keyservers.net:80 --**recv**-**keys** 58118E89F3A912897C070ADBF76221572C52609D

Open the /etc/apt/sources.list.d/docker.list file

1. If the file doesn’t exist, create it.
2. Remove any existing entries

Write the following line in the file

deb https://apt.dockerproject.org/repo ubuntu-trusty main

save it and close the file

Update the APT package index.

1. $ sudo apt-get **update**

Purge the old repo if it exists.

1. $ sudo apt-get **purge** lxc-docker

Verify that APT is pulling from the right repository.

$ apt-**cache** **policy** docker-**engine**

Update your package manager.

1. $ sudo apt-get **update**

Install the recommended packages.

$ sudo apt-get **install** linux-image-extra-$(uname -r) linux-image-extra-**virtual**

Update your APT package index.

1. $ sudo apt-get **update**

Install Docker.

1. $ sudo apt-get **install** docker-**engine**

Start the docker daemon.

1. $ sudo service docker **start**

Verify docker is installed correctly.

$ sudo docker **run** hello-world

Install [Docker Compose](https://docs.docker.com/compose/install/) (Note you can also install in a virtualenv with

$ pip install docker-compose

service couchdb stop

service redis-server stop

service elasticsearch stop

service postgresql stop

./scripts/docker runserver --bootstrap

This will do the following:

* build all the images (if not already built)
* run all the service containers
* migrate the DB and sync the Couch views
* bootstrap a superuser and domain:
  + username: [admin@example.com](mailto:admin@example.com)
  + password: password
  + domain: demo
* run the Django dev server

If all goes according to plan you should be able to log into CommCare: http://localhost:8000 using the login details above.

You can create another user and domain with $ ./manage.py bootstrap DOMAIN EMAIL PASSWORD

**Configure your localsettings**

There are two different localsettings configurations, depending on whether HQ is running inside a docker container or on your local machine.

* Running HQ inside a docker container

Do nothing; docker/localsettings.py will be used inside the container.

* Running docker services only
  + Copy the appropriate postgres/couch/elasticsearch/redis configurations from docker/localsettings.py tolocalsettings.py
  + Replace the HOST values in the configurations (e.g. postgres) with localhost

./scripts/docker --help

**The services (couch, postgres, elastic, redis, zookeeper, kafka)**

$ ./scripts/docker up -d # start docker services in background

$ ./scripts/docker stop

$ ./scripts/docker logs postgres

**Run the django server**

$ ./scripts/docker runserver

**Submitting and syncing from your local HQ instance (harder method)**

**Install nginx**

sudo apt-get install nginx or

brew install nginx

**Install the configuration file**

At the bottom of the http{} block in /etc/nginx/nginx.conf add the line

include /path/to/commcarehq/deployment/nginx/cchq\_local\_nginx.conf;

**Start nginx**

sudo nginx

**Make sure your local django application is accessible over the network**

./manage.py runserver

Try accessing http://localhost/a/domain and see if it works. nginx should proxy all requests to localhost to your django server. You should also be able to access http://your\_ip\_address/a/domain from a phone or other device on the same network.

**Make Commcare use your local IP address**

Set the BASE\_ADDRESS setting in localsettings.py to your IP address (e.g. 192.168.0.10), without a port. You'll have to update this if you ever change networks or get a new IP address.

**Rebuild and redeploy your application**

You'll have to rebuild and redeploy your application to get it to sync.

**Run these commands while commcare-hq is running in the seprate terminal**

./manage.py run\_ptop --pillow-key=core

./manage.py run\_ptop --pillow-key=core\_ext

./manage.py run\_ptop --pillow-name=DefaultChangeFeedPillow

**Related to mobile worker list issues**

For the deletion of elasticsearch index

curl -XDELETE localhost:9200/.mar\*

For recreation of elasticsearch index

 ./manage.py ptop\_preindex

**Important Links**

<https://github.com/dimagi/commcare-hq>

<https://github.com/dimagi/commcare-hq/blob/master/corehq/apps/builds/README.md>

<https://groups.google.com/forum/#!forum/commcare-developers>

<https://github.com/dimagi/commcare-hq/blob/master/docker/README.md>

<https://github.com/dimagi/commcare-hq/blob/master/PRODUCTION-INSTALL.md>