Mastering Docker

Shrikrishna Holla

Video 1.3

Docker CLI Commands



```
→ a docker-machine ls
NAME
             ACTIVE
                      DRIVER
                                   STATE
                                            URL
                                                                                DOCKER
                                                                                          ERRORS
                                                                        SWARM
                                   Running
                                            tcp://52.204.118.222:2376
aws-sigalrm
                                                                                v1.11.2
                      amazonec2
                     virtualbox
                                   Running
                                            tcp://192.168.99.100:2376
                                                                                v1.11.0
dev
             *
                      virtualbox
k8s
                                                                                Unknown
                                   Stopped
-
-
-
→ docker run -it ubuntu /bin/bash
Unable to find image 'ubuntu:latest' locally
latest: Pulling from library/ubuntu
f069f1d21059: Pull complete
ecbeec5633cf: Pull complete
ea6f18256d63: Pull complete
54bde7b02897: Pull complete
Digest: sha256:bbfd93a02a8487edb60f20316ebc966ddc7aa123c2e609185450b96971020097
Status: Downloaded newer image for ubuntu:latest
root@dc22a879a629:/#
root@dc22a879a629:/#
root@dc22a879a629:/#
root@dc22a879a629:/#
root@dc22a879a629:/# ls
bin boot core dev etc home lib lib64 media mnt opt proc root run sbin srv sys tmp usr var
root@dc22a879a629:/#
```



coreserver_web	latest	sha256:504c5	2 weeks ago	754.7 MB		
debian	jessie	sha256:1b088	3 weeks ago	125.1 MB		
node	6.2.1	sha256:72d4e	4 weeks ago	649.7 MB		
node	5.11.1	sha256:6300c	6 weeks ago	647.6 MB		
mongo-express	latest	sha256:4381f	7 weeks ago	251.9 MB		
redis	latest	sha256:be9c5	8 weeks ago	184.9 MB		
mongo	latest	sha256:a55d8	9 weeks ago	313.1 MB		
alpine	latest	sha256:d7a51	3 months ago	4.798 MB		
gaetan/dockercraft	latest	sha256:a85b3	4 months ago	842.7 MB		
→ ~·						
→ ~						
m) m						
→ ~ docker ps						
CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
→ w						
→ ~						
→ ~·						
→ w docker ps -a						
CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
dc22a879a629	ubuntu	"/bin/bash"	5 minutes ago	Exited (0) 3 minutes	ago	tender_stonebraker
→ ~						
→ ~						
→ w						
→ ~						
	rm ubuntu /bin/bo	ash				
root@3db8ec180cae:/						
root@3db8ec180cae:/						
root@3db8ec180cae:/						
→ ~						
→ w						
→ ~ docker ps -a						
CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
dc22a879a629	ubuntu	"/bin/bash"	6 minutes ago	Exited (0) 3 minutes		tender_stonebraker
→ ~ 				Coy o manacou		PACKde
						- VIDEO

```
→ docker images
REPOSITORY
                    TAG
                                        IMAGE ID
                                                            CREATED
                                                                                VIRTUAL SIZE
                                                            6 weeks ago
                    5.11.1
                                        sha256:6300c
                                                                                647.6 MB
node
                                        sha256:4381f
                                                            7 weeks ago
                     latest
                                                                                251.9 MB
mongo-express
                                                            8 weeks ago
                                                                                184.9 MB
redis
                     latest
                                        sha256:be9c5
                                                            9 weeks ago
                     latest
                                        sha256:a55d8
                                                                                313.1 MB
mongo
                                                            3 months ago
alpine
                                                                                4.798 MB
                    latest
                                        sha256:d7a51
gaetan/dockercraft
                                        sha256:a85b3
                                                            4 months ago
                    latest
                                                                                842.7 MB
*
*
→ a docker images -q
sha256:6300c
sha256:4381f
sha256: be9c5
sha256:a55d8
sha256:d7a51
sha256:a85b3
*
7
Ť
  - docker rmi $(docker images -q)
```



→ docker network create familiar

Ϊ

'familiar' can be replaced with any other name



→ ~ docker network create familiar b688de6157be6e7aa2fd0ff9698782f0ceabb7a42ce59b384a9034a0891bdb5f

→ ~ docker network ls NETWORK ID DRIVER 215ebbaade91 host host b688de6157be familiar bridge 9ddb5afc41d9 bridge bridge 3af83a6557f2 bridge coreserver_default null 55285ed81fe2 none **→** ~



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»» Note

You may also use diaspora-installer package &, which is easier, but this method is not recommended yet.

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https://wiki.diasporafoundation.org/Installation/debian/Jessie

9 Database setup

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radi dee year normal door of even belief disalle a coparate deel for biacpora (falloriale by)

Before you start

You need to choose if you want a production setup or development setup. Diaspora has three development trees: master, stable and develop. The master tree always contains the current release. The stable tree is where new features and bug fixes are added before a new minor version is released. The develop tree is where new features and bug fixes are added before a new major version is released. Therefore if you want a development setup you should run from develop. But it isn't guaranteed to be in a good state, so it's not recommended to run a production setup from it.

Diaspora is written in Ruby on Rails and therefore knows different running modes. These have nothing to do with running from the master or the develop tree. Nonetheless we recommend the development mode for development setups and production mode for production setups. The difference is, apart from a slightly different default configuration, speed. The development mode reloads the code on each request, so it speeds up your development. The production mode doesn't do that, so pages load significantly faster. That's the only major difference you need to care about. To emphasize it one more time: Running a production setup in development mode gains you nothing.

Lastly you can choose between running on MySQL/MariaDB or PostgreSQL, in our experience PostgreSQL achieves a better performance.

Versions of this guide



»» Note

Important! Make sure to use the correct version of the guide, see below.

The current guide is for a production setup with PostgreSQL as database.

You can change them below:

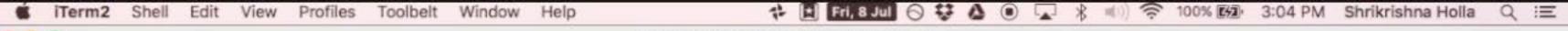
Database: MySQL | PostgreSQL | MariaDB Running mode: Production | Development

Requirements

Hardware

For running an average-sized pod, your server should have at the very least 512MB of RAM (+1GB swap space) and a decent multi-core CPU. The amount of hard disk space required largely depends on how many images you expect your users to upload. If you plan to run the database server on the same host you should allow for at least double the amount of RAM and disk space.

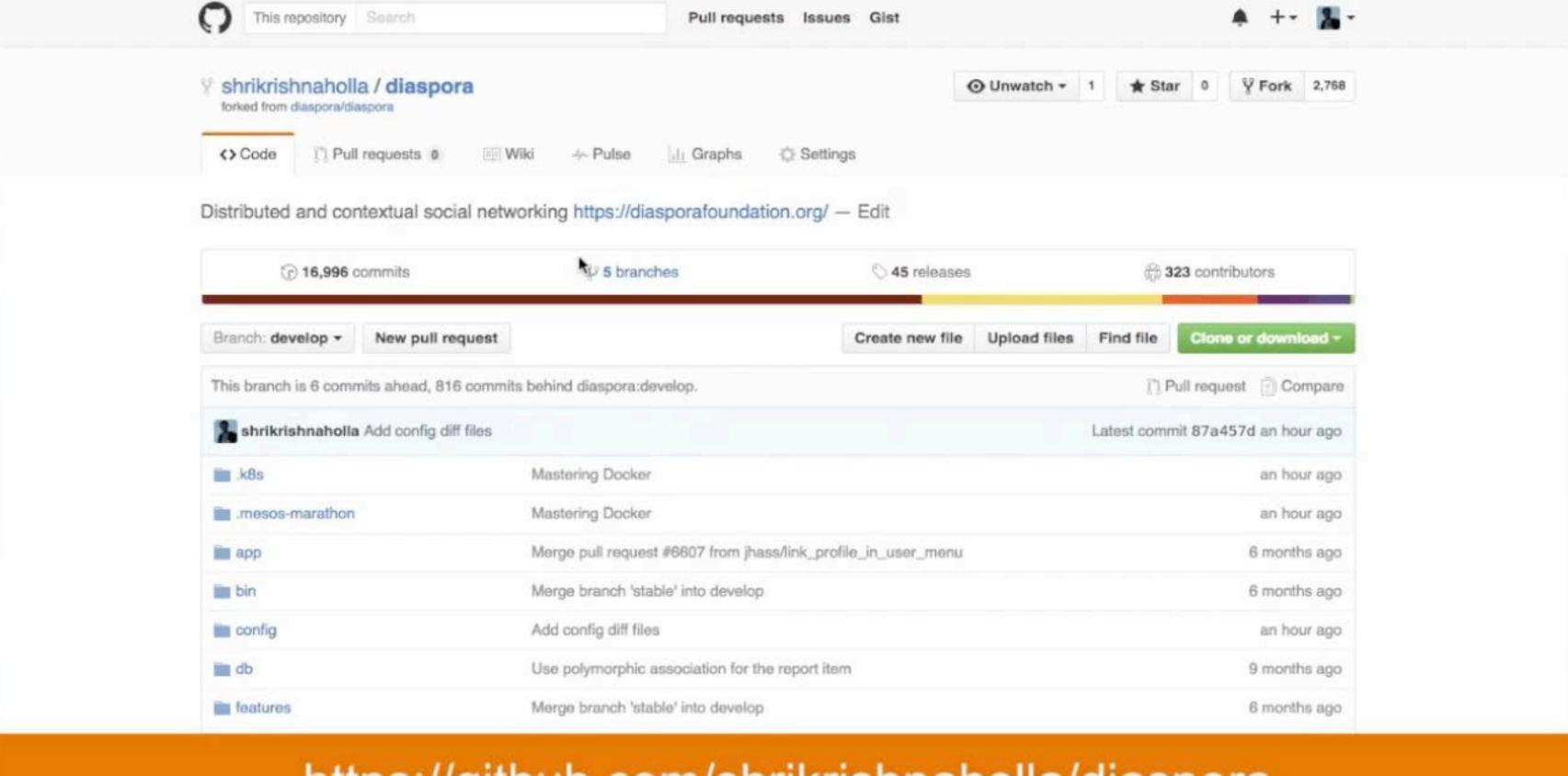
Software



2. shrikrishna@Shrikrishna-Holla: ~ (zsh)

→ - docker run -d --net familiar --name db postgres:latest





https://github.com/shrikrishnaholla/diaspora



```
--- config/diaspora.yml.example 2016-01-16 16:39:17.000000000 +0530
+++ config/diaspora.yml 2016-03-21 20:01:08.000000000 +0530
@ -58,7 +58,7 @
    ## you're not using SSL. Also there is no guarantee that posting to
     ## services will be possible if SSL is disabled.
     ## Do not change this default unless you are sure!
    #require_ssl: true
    require_ssl: false
     ## Single-process mode (default=false).
     ## If set to true, Diaspora will work with just the appserver (Unicorn by
@ -125,7 +125,7 @
       ## Serve static assets via the appserver (default=false).
       ## This is highly discouraged for production use. Let your reverse
       ## proxy/webserver do it by serving the files under public/ directly.
       #serve: false
       serve: true
       ## Upload your assets to S3 (default=false).
       #upload: false
@ -165,7 +165,7 @
     ## Where the appserver should listen to (default=unix:tmp/diaspora.sock)
     #listen: 'unix:tmp/diaspora.sock'
     #listen: 'unix:/run/diaspora/diaspora.sock'
    #listen: 127.0.0.1:3000
    listen: '0.0.0.0:3000'
     ## Set the path for the PID file of the unicorn master process (
       default=none)
     #pid: '/run/diaspora/diaspora.pid'
@ -173,7 +173,7 @
     ## Rails environment (default='development').
     ## The environment in which the server should be started by default.
     ## Change this to 'production' if you wish to run a production
       environment.
    #rails_environment: 'development'
    rails_environment: 'development'
```

config/diaspora.yml.diff



```
--- config/database.yml.example 2016-01-03 20:04:31.000000000 +0530
+++ config/database.yml 2016-04-14 17:26:07.000000000 +0530
@ -1,20 +1,20 @
postgresql: &postgresql
   adapter: postgresql
  host: localhost
  host: db
   port: 5432
   username: postgres
   password:
   encoding: unicode
-mysql: amysql
  adapter: mysql2
   host: "localhost"
   port: 3306
   username: "root"
   password: ""
+# mysql: &mysql
+# adapter: mysql2
    host: "localhost"
    port: 3306
+# username: "root"
    password: ""
   socket: /tmp/mysql.sock
   encoding: utf8mb4
   collation: utf8mb4 bin
+ # encoding: utf8mb4
+ # collation: utf8mb4_bin
# Comment the the mysql line and uncomment the postgres line
```

config/database.yml.diff



```
→ a docker ps
CONTAINER ID
                   IMAGE
                                       COMMAND
                                                               CREATED
                                                                                   STATUS
                                       "/docker-entrypoint.s"
78c5d50a3e91
                   postgres:latest
                                                               18 minutes ago
                                                                                   Up 18 minutes
~
-
→ ~ docker run -it --net familiar --name web \
-p 3000:3000 --env RAILS_ENV=development --env DB=postgres --env PORT=3000 \
debian:jessie /bin/bash
```



NAMES

db

PORTS

5432/tcp

```
docker ps
                    IMAGE
                                        COMMAND
                                                                 CREATED
CONTAINER ID
                                        "/docker-entrypoint.s"
78c5d50a3e91
                    postgres:latest
                                                                 18 minutes ago
→ a docker run -it --net familiar --name web \
-p 3000:3000 --env RAILS_ENV=development --env DB=postgres --env PORT=3000 \
debian: jessie /bin/bash
root@e110863740ef:/# ping db
PING db (172.19.0.2): 56 data bytes
64 bytes from 172.19.0.2: icmp_seq=0 ttl=64 time=0.065 ms
64 bytes from 172.19.0.2: icmp_seq=1 ttl=64 time=0.060 ms
64 bytes from 172.19.0.2: icmp_seq=2 ttl=64 time=0.062 ms
--- db ping statistics ---
3 packets transmitted, 3 packets received, 0% packet loss
round-trip min/avg/max/stddev = 0.060/0.062/0.065/0.000 ms
root@e110863740ef:/#
root@e110863740ef:/#
```

root@e110863740ef:/#



NAMES

db

STATUS

Up 18 minutes

PORTS

5432/tcp

```
root@e110863740ef:/# apt-get update && apt-get install -y --fix-missing \
             build-essential \
              libssl-dev \
             libcurl4-openssl-dev \
             libxml2-dev \
              libxslt-dev \
              imagemagick \
             ghostscript \
             git \
              cmake \
             curl \
             libpq-dev \
             libmagickwand-dev \
             nodejs \
             gawk \
              libreadline6-dev \
             libyaml-dev \
              libsqlite3-dev \
             sqlite3 \
             autoconf \
             libgdbm-dev \
             libncurses5-dev \
             automake \
             bison \
              libffi-dev
Get:1 http://security.debian.org jessie/updates InRelease [63.1 kB]
100% [1 InRelease gpgv 63.1 kB] [Connecting to mirrors.tuna.tsinghua.edu.cn]
```



```
root@e110863740ef:/# adduser --disabled-login --gecos "" diaspora Adding user `diaspora' ...
Adding new group `diaspora' (1000) ...
Adding new user `diaspora' (1000) with group `diaspora' ...
Creating home directory `/home/diaspora' ...
Copying files from `/etc/skel' ...
root@e110863740ef:/# su diaspora
diaspora@e110863740ef:/$
diaspora@e110863740ef:/$
diaspora@e110863740ef:/$
diaspora@e110863740ef:/$
diaspora@e110863740ef:/$
diaspora@e110863740ef:/$
diaspora@e110863740ef:/$
```



× dlaspora⊜e1108637 3€1 ×	(~ (zsh) %2					
→ ~ docker ps CONTAINER ID ES	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAM
e110863740ef 78c5d50a3e91	debian:jessie postgres:latest	"/bin/bash" "/docker-entrypoint.s"	About an hour ago About an hour ago		0.0.0.0:3000->3000/tcp 5432/tcp	web db
→ ~ → ~ docker cp /Use	ers/shrikrishna/proje	ects/diaspora web:/home/di	aspora/diaspora			

→ ~ ■

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a secure muys.//iviii.io

Cut Rubies with ease!

Install RVM:

```
$ gpg --keyserver hkp://keys.gnupg.net --recv-keys 409B6B1796C275462F
$ \curl -sSL https://get.rvm.io | bash -s stable
```

For all in one installation append --rails or --ruby or --ruby=1.9.3

- more secure installation
- for more details visit the installation documentation,
- and read about the new autolib features
- watch the most accurate (but not official) rvm screencast,
- · read the most accurate (but not official) rvm cheat sheet,
- starting with Rails? watch the RailsCasts.com on Getting Started with Rails

Community Maintained Project

RVM is maintained and supported by the community via issue trackers and pull requests:

- on each project in RVM Github organization,
- especially RVM project issues tracker.

Myths ignoring Netbeans Offline Culerity Importing Simple Terminal Prerequisites Initial Security Listing SketchUp Upgrading Using Jenkins MacPorts Interpreters Set Actions QT Ruby MRI/YARV (ruby) do Sudo JRuby (jruby) tests Tk Rubinius (rbx) benchmark Vagrant Rubies Workflow Vim Alias Chruby Gnome-terminal Default Completion **LXTerminal** Examples Docs XTerm Info Hooks Konsole Installing Irbrc Deployment List Projects **Best Practices** Prompt Named Capistrano Patching Proxy Chef Removing Rymrc Cron Rubygems Screen God Strings Scripting Init D Subshells Uninstalling Passenger Upgrading

Wayne

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Michal

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Troubleshooting

Fixing Broken SSL

```
diaspora@e110863740ef:/$ gpg --keyserver hkp://keys.gnupg.net --recv-keys 409B6B1796C275462A1703113804BB82D39DC0E3
gpg: directory `/home/diaspora/.gnupg' created
gpg: new configuration file `/home/diaspora/.gnupg/gpg.conf' created
gpg: WARNING: options in `/home/diaspora/.gnupg/gpg.conf' are not yet active during this run
gpg: keyring `/home/diaspora/.gnupg/secring.gpg' created
gpg: keyring `/home/diaspora/.gnupg/pubring.gpg' created
gpg: requesting key D39DC0E3 from hkp server keys.gnupg.net
gpg: /home/diaspora/.gnupg/trustdb.gpg: trustdb created
gpg: key D39DC0E3: public key "Michal Papis (RVM signing) <mpapis@gmail.com>" imported
gpg: no ultimately trusted keys found
gpg: Total number processed: 1
gpg: imported: 1 (RSA: 1)
diaspora@e110863740ef:/$
```



```
X diaspora@e1108637__ %1 X
diaspora@e110863740ef:/$ gpg --keyserver hkp://keys.gnupg.net --recv-keys 409B6B1796C27546ZA1703113804BB82D39DC0E3
gpg: directory `/home/diaspora/.gnupg' created
gpg: new configuration file '/home/diaspora/.gnupg/gpg.conf' created
    WARNING: options in '/home/diaspora/.gnupg/gpg.conf' are not yet active during this run
gpg: keyring `/home/diaspora/.gnupg/secring.gpg' created
    keyring '/home/diaspora/.gnupg/pubring.gpg' created
gpg: requesting key D39DC0E3 from hkp server keys.gnupg.net
gpg: /home/diaspora/.gnupg/trustdb.gpg: trustdb created
gpg: key D39DC0E3: public key "Michal Papis (RVM signing) 
mpapis@gmail.com>" imported
gpg: no ultimately trusted keys found
gpg: Total number processed: 1
                   imported: 1 (RSA: 1)
gpg:
diaspora@e110863740ef:/$ \curl -sSL https://get.rvm.io | bash -s stable
Downloading https://github.com/rvm/rvm/archive/1.27.0.tar.gz
Downloading https://github.com/rvm/rvm/releases/download/1.27.0/1.27.0.tar.gz.asc
```



```
oading https://github.com/rvm/rvm/releases/download/1.27.0/1.27.0.tar.gz.asc
Signature made Tue Mar 29 13:49:47 2016 UTC using RSA key ID BF04FF17
Good signature from "Michal Papis (RVM signing) <mpapis@gmail.com>"
WARNING: This key is not certified with a trusted signature!
        There is no indication that the signature belongs to the owner.
ry key fingerprint: 409B 6B17 96C2 7546 2A17 0311 3804 BB82 D39D C0E3
Subkey fingerprint: 62C9 E5F4 DA30 0D94 AC36 166B E206 C29F BF04 FF17
erified '/home/diaspora/.rvm/archives/rvm-1.27.0.tgz'
lling RVM to /home/diaspora/.rvm/
dding rvm PATH line to /home/diaspora/.profile /home/diaspora/.mkshrc /home/diaspora/.bashrc /home/diaspora/.zshrc.
dding rvm loading line to /home/diaspora/.profile /home/diaspora/.bash_profile /home/diaspora/.zlogin.
llation of RVM in /home/diaspora/.rvm/ is almost complete:
o start using RVM you need to run `source /home/diaspora/.rvm/scripts/rvm`
n all your open shell windows, in rare cases you need to reopen all shell windows.
spora,
hank you for using RVM!
e sincerely hope that RVM helps to make your life easier and more enjoyable!!!
yne, Michal & team.
se of problems: https://rvm.io/help and https://twitter.com/rvm_io
ora@e110863740ef:/$
ora@e110863740ef:/$
pra@e110863740ef:/$
ora@e110863740ef:/$ /bin/bash -l -c 'source "$HOME/.rvm/scripts/rvm" && rvm autolibs read-fail && rvm install[2:2.1]
```

```
diaspora@e110863740ef:/$ source $HOME/.rvm/scripts/rvm
diaspora@e110863740ef:/$ cd /home/diaspora/diaspora
diaspora@e110863740ef:~/diaspora$
diaspora@e110863740ef:~/diaspora$ gem install bundler --no-ri --no-rdoc && bundle install --without test development --with postgres
Fetching: bundler-1.12.5.gem (100%)
Successfully installed bundler-1.12.5
1 gem installed
There was an error while trying to write to '/home/diaspora/diaspora/.bundle/config'. It is likely that you need to grant write
permissions for that path.
diaspora@e110863740ef:~/diaspora$ exit
exit
root@e110863740ef:/# chown -R diaspora /home/diaspora
root@e110863740ef:/# su diaspora
diaspora@e110863740ef:/$ source $HOME/.rvm/scripts/rvm
diaspora@e110863740ef:/$
diaspora@e110863740ef:/$
diaspora@e110863740ef:/$
diaspora@e110863740ef:/$ jcd /home/diaspora/diaspora
diaspora@e110863740ef:~/diaspora$ chown -R diaspora /home/diaspora^C
diaspora@e110863740ef:~/diaspora$ gem install bundler --no-ri --no-rdoc && bundle install --without test development --with postgres
```

If you get permission errors at any time, grant write access to /home/diaspora



```
When upgrading

Re-run the migrations generator

rake acts_as_taggable_on_engine:install:migrations

This will create any new migrations and skip existing ones

Version 3.5.0 has a migration for mysql adapter
diaspora@e110863740ef:~/diaspora$
diaspora@e110863740ef:~/diaspora$
diaspora@e110863740ef:~/diaspora$
diaspora@e110863740ef:~/diaspora$
diaspora@e110863740ef:~/diaspora$
diaspora@e110863740ef:~/diaspora$
diaspora@e110863740ef:~/diaspora$
diaspora@e110863740ef:~/diaspora$
```

Post-install message from acts-as-taggable-on:



diaspora@e110863740ef:~/diaspora\$ echo 'source "\$HOME/.rvm/scripts/rvm"' >> ~/.bashrc
diaspora@e110863740ef:~/diaspora\$
diaspora@e110863740ef:~/diaspora\$
diaspora@e110863740ef:~/diaspora\$ rake db:create db:schema:load







diaspora@e110863740ef:~/diaspora\$
diaspora@e110863740ef:~/diaspora\$
diaspora@e110863740ef:~/diaspora\$
bundle exec unicorn -c config/unicorn.rb
[2016-07-08T13:10:03.872887 #11782] INFO -- : Refreshing Gem list



```
X diaspora@e1108637... %1 X ~ (zsh)
diaspora@e110863740ef:~/diaspora$
diaspora@e110863740ef:~/diaspora$
diaspora@e110863740ef:~/diaspora$ bundle exec unicorn -c config/unicorn.rb
I, [2016-07-08T13:10:03.872887 #11782] INFO -- : Refreshing Gem list
[2016-07-08T13:10:11] INFO PID-11782 TID-15366500 DiasporaFederation: successfully configured the federation library
                                          *debua
                                                    -T
- <Appenders::Stdout:0x28cb084 name="stdout">
- <Appenders::RollingFile:0x287f634 name="file">
 ActionMailer::Base .....
                                           debug +A -T
                                          *debug +A -T
 ActiveRecord::Base .....
 ActiveSupport::Cache::FileStore .....
                                           debug +A -T
                                           debug +A -T
 ActiveSupport::Dependencies ......
 DiasporaFederation .....
                                           debua
                                                +A
 Logging .....
                                           *off -A -T
 Rails .....
                                           debug +A -T
 XMLLogger .....
                                           *info +A -T
I, [2016-07-08T13:10:12.785172 #11782] INFO -- : listening on addr=0.0.0.0:3000 fd=12
I, [2016-07-08T13:10:12.807011 #11782] INFO -- : master process ready
I, [2016-07-08T13:10:12.819156 #11793] INFO -- : worker=0 ready
```



In my case, it will be at 192.168.99.100:3000



Welcome, friend.

You're about to change the Internet. Let's get you set up, shall we?

Configure your pod



Look at config/diaspora.yml.example and config/database.yml.example for help.

..

Try it out



Start by creating an account

Make a contribution!



Make Diaspora even better! Fork the project on Github make some changes, and submit a pull request.

https://192.168.99.100:3000



```
X diaspora@e1108637... %1 X ~ (zsh)
[2016-07-08T13:10:49] DEBUG PID-11806 TID-15366500 Rails:
[2016-07-08T13:10:49] INFO PID-11806 TID-15366500 Rails: Started GET "/assets/tag_following_list_tpl.js?body=1" for 192.168.99.1 at
2016-07-08 13:10:49 +0000
192.168.99.1 - - [08/Jul/2016:13:10:49 +0000] "GET /tag_following_list_tpl.js?body=1 HTTP/1.1" 200 - 0.0461
[2016-07-08T13:10:49] DEBUG PID-11806 TID-15366500 Rails:
[2016-07-08T13:10:49] DEBUG PID-11806 TID-15366500 Rails:
[2016-07-08T13:10:49] INFO PID-11806 TID-15366500 Rails: Started GET "/assets/branding/logos/logo.png" for 192.168.99.1 at 2016-07-0
8 13:10:49 +0000
192.168.99.1 - - [08/Jul/2016:13:10:49 +0000] "GET /branding/logos/logo.png HTTP/1.1" 200 - 0.0527
[2016-07-08T13:10:49] DEBUG PID-11806 TID-15366500 Rails:
[2016-07-08T13:10:49] DEBUG PID-11806 TID-15366500 Rails:
[2016-07-08T13:10:49] INFO PID-11806 TID-15366500 Rails: Started GET "/assets/landing/cog.png" for 192.168.99.1 at 2016-07-08 13:10:
49 +0000
192.168.99.1 - - [08/Jul/2016:13:10:49 +0000] "GET /landing/cog.png HTTP/1.1" 200 - 0.1052
[2016-07-08T13:10:49] DEBUG PID-11806 TID-15366500 Rails:
[2016-07-08T13:10:49] DEBUG PID-11806 TID-15366500 Rails:
[2016-07-08T13:10:49] INFO PID-11806 TID-15366500 Rails: Started GET "/assets/landing/smiley_laughing.png" for 192.168.99.1 at 2016-
07-08 13:10:49 +0000
192.168.99.1 - - [08/Jul/2016:13:10:49 +0000] "GET /landing/smiley_laughing.png HTTP/1.1" 200 - 0.0625
[2016-07-08T13:10:49] DEBUG PID-11806 TID-15366500 Rails:
[2016-07-08T13:10:49] DEBUG PID-11806 TID-15366500 Rails:
[2016-07-08T13:10:49] INFO PID-11806 TID-15366500 Rails: Started GET "/assets/landing/pen_write.png" for 192.168.99.1 at 2016-07-08
13:10:49 +0000
192.168.99.1 - - [08/Jul/2016:13:10:49 +0000] "GET /landing/pen_write.png HTTP/1.1" 200 - 0.0744
[2016-07-08T13:10:49] DEBUG PID-11806 TID-15366500 Rails:
[2016-07-08T13:10:49] DEBUG PID-11806 TID-15366500 Rails:
[2016-07-08T13:10:49] INFO PID-11806 TID-15366500 Rails: Started GET "/assets/favicon.png" for 192.168.99.1 at 2016-07-08 13:10:49 +
0000
192.168.99.1 - - [08/Jul/2016:13:10:50 +0000] "GET /favicon.png HTTP/1.1" 200 - 0.0529
```

-→ docker cp /Users/shrikrishna/projects/diaspora web:/home/diaspora/diaspora → docker-machine ip dev 192.168.99.100 → docker ps CONTAINER ID COMMAND **STATUS** NAMES IMAGE **PORTS** CREATED e110863740ef debian: jessie "/bin/bash" 2 hours ago Up 2 hours 0.0.0.0:3000->3000/tcp web 78c5d5@a3e91 postgres:latest "/docker-entrypoint.s" 2 hours ago Up 2 hours 5432/tcp db → a docker diff web

About an hour ago

Up About an hour

5432/tcp

"/docker-entrypoint.s"

78c5d50a3e91

postgres:latest



db

A /var/log/fontconfig.log C /var/log/lastlog

-> ~

A /var/lib/ghostscript/CMap/UniKS-UTF16-H

A /var/lib/ghostscript/CMap/UniKS-UTF16-V

A /var/lib/ghostscript/CMap/UniKS-UTF32-H

A /var/lib/ghostscript/CMap/UniKS-UTF32-V

A /var/lib/ghostscript/CMap/UniKS-UTF8-H

A /var/lib/ghostscript/CMap/UniKS-UTF8-V

A /var/lib/ghostscript/CMap/WP-Symbol

A /var/lib/ghostscript/fonts/Fontmap

A /var/lib/ghostscript/fonts/cidfmap

A /var/lib/saml-base/supercatalog.old

A /var/lib/ucf/cache/:etc:papersize

A /var/lib/sgml-base/supercatalog

A /var/lib/ghostscript/CMap/V

A /var/lib/ghostscript/fonts

A /var/lib/git

A /var/lib/ucf

A /var/lib/sgml-base

A /var/lib/ucf/cache

A /var/lib/ucf/hashfile

A /var/lib/ucf/registry

A /var/lib/xml-core

C /var/log

C /var/log/apt

A /var/lib/ucf/hashfile.0

A /var/lib/xml-core/catalog

C /var/log/alternatives.log

A /var/log/apt/history.log

A /var/log/apt/term.log

C /var/log/dpkg.log

C /var/log/faillog

A /var/lib/xml-core/xml-core

ACKTe ny

→ ~
docker commit --change "CMD /bin/bash -l -c \"cd /home/diaspora/diaspora && bundle exec unicorn -c config/unicorn.rb\"" --change "USER diaspora" web shrikrishna/familiar:cli



```
    → ~
    → ~
    → ~ docker commit --change "CMD /bin/bash -l -c \"cd /home/diaspora/diaspora && bundle exec unicorn -c config/unicorn.rb\"" --change "USER diaspora" web shrikrishna/familiar:cli
    sha256:7efbf1a18ea52ae34edfe70d9b818271018145eee68e0c75878354eee68d82fd
    → ~ docker
```



→ ~ docker commit --change "CMD /bin/bash -l -c \"cd /home/diaspora/diaspora && bundle exec unicorn -c config/unicorn.rb\"" --change " USER diaspora" web shrikrishna/familiar:cli sha256:7efbf1a18ea52ae34edfe70d9b818271018145eee68e0c75878354eee68d82fd docker images

REPOSITORY	TAG	IMAGE ID	CREATED	VIRTUAL SIZE
shrikrishna/familiar	cli	sha256:7efbf	18 seconds ago	1.618 GB
postgres	latest	sha256:7ee9d	4 weeks ago	275.3 MB
debian	jessie	sha256:1b088	4 weeks ago	125.1 MB
	-			



```
→ ~ docker commit --change "CMD /bin/bash -l -c \"cd /home/diaspora/diaspora && bundle exec unicorn -c config/unicorn.rb\"" --change "USER diaspora" web shrikrishna/familiar:cli sha256:7efbf1a18ea52ae34edfe70d9b818271018145eee68e0c75878354eee68d82fd
→ ~ docker images
REPOSITORY TAG IMAGE ID CREATED VIRTUAL SIZE
```

shrikrishna/familiar cli sha256:7efbf 18 seconds ago 1.618 GB 4 weeks ago 275.3 MB postgres latest sha256:7ee9d 4 weeks ago jessie 125.1 MB debian sha256:1b088 → a docker login



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```
→ docker commit --change "CMD /bin/bash -l -c \"cd /home/diaspora/diaspora && bundle exec unicorn -c config/unicorn.rb\"" --change "
USER diaspora" web shrikrishna/familiar:cli
sha256:7efbf1a18ea52ae34edfe70d9b818271018145eee68e0c75878354eee68d82fd
→ docker images
REPOSITORY
                                          IMAGE ID
                      TAG
                                                              CREATED
                                                                                  VIRTUAL SIZE
shrikrishna/familiar
                      cli
                                          sha256:7efbf
                                                              18 seconds ago
                                                                                  1.618 GB
                      latest
                                          sha256:7ee9d
                                                              4 weeks ago
                                                                                  275.3 MB
postgres
debian
                      jessie
                                          sha256:1b088
                                                              4 weeks ago
                                                                                  125.1 MB
→ ~ docker login
```

- docker roger

Username (shrikrishna):

WARNING: login credentials saved in /Users/shrikrishna/.docker/config.json

Login Succeeded

→ docker push shrikrishna/familiar:cli

The push refers to a repository [docker.io/shrikrishna/familiar]



docker images REPOSITORY IMAGE ID TAG CREATED VIRTUAL SIZE shrikrishna/familiar cli sha256:7efbf 3 minutes ago 1.618 GB 4 weeks ago postgres latest sha256:7ee9d 275.3 MB debian jessie sha256:1b088 4 weeks ago 125.1 MB → ~ docker save shrikrishna/familiar:cli > familiar.cli.tar



~ docker load -i familiar.cli.tar



→ ~ → ~ → ~ → ~ docker help

Ĭ



```
images
          List images
import
          Import the contents from a tarball to create a filesystem image
info
          Display system-wide information
inspect
          Return low-level information on a container or image
kill
          Kill a running container
          Load an image from a tar archive or STDIN
load
login
          Register or log in to a Docker registry
logout
          Log out from a Docker registry
          Fetch the logs of a container
logs
network
          Manage Docker networks
          Pause all processes within a container
pause
          List port mappings or a specific mapping for the CONTAINER
port
          List containers
ps
pull
          Pull an image or a repository from a registry
          Push an image or a repository to a registry
push
          Rename a container
rename
          Restart a container
restart
          Remove one or more containers
nm
rmi
          Remove one or more images
          Run a command in a new container
run
          Save an image(s) to a tar archive
save
          Search the Docker Hub for images
search
          Start one or more stopped containers
start
stats
          Display a live stream of container(s) resource usage statistics
          Stop a running container
stop
          Tag an image into a repository
tag
top
          Display the running processes of a container
          Unpause all processes within a container
unpause
version
          Show the Docker version information
          Manage Docker volumes
volume
          Block until a container stops, then print its exit code
wait
```



What is Docker? Solutions Get Docker Pricing Open Source Company

Docker Engine

Docker for Mac

Docker for Windows

Docker Compose

CS Docker Engine

Universal Control Plane

Docker Trusted Registry

Docker Cloud

Docker Hub

Docker Machine

Docker Store

Docker Toolbox

Component Projects

Open Source at Docker

About

Welcome to the Docker Documentation



Docker for Mac

A native application using the OS X sandbox security model which delivers all Docker tools to your Mac.



Docker for Windows

A native Windows application which delivers all Docker tools to your Windows computer.



Docker for Linux

Install Docker on a computer which already has a Linux distribution installed.



Docker Engine

Create Docker images and run Docker containers.

As of v1.12.0-rc1, Engine includes swarm mode container orchestration features.



Docker Compose

Defines applications built using multiple containers.



Docker Hub



Docker Cloud

https://docs.socker.com





Next Video

Scripting Primer

