

Meteor in Production

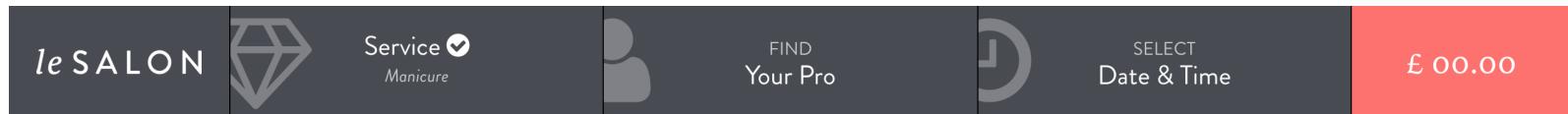
By Freeman

FREEMAN (me)

- **Coding since 2011**
- **Before 2015, front end dev / startup founder - Backbone.js, Grunt**
- **2015 onwards, full stack contractor - Jekyll, Ember.js, Angular 1, React, Webpack, Rails, Express.js, Swift, Ionic 2, React Native...**
- **...Meteor!**

The Story

METEOR



Select your Service



Manicure



Pedicure



Mani & Pedi

Select your Polish



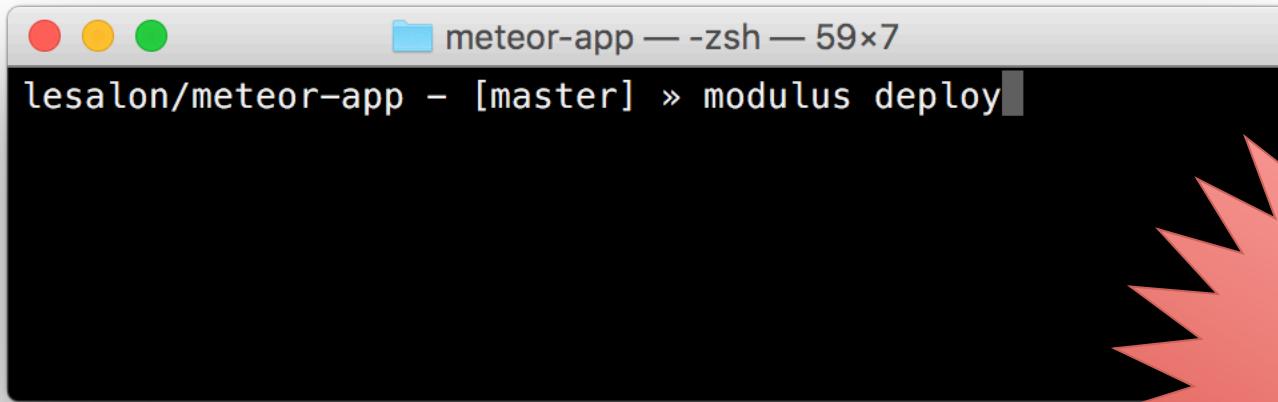
The Story

- Started working with LeSalon in March 2016
- Previous contractor liked to try new things but never finished projects
- Meteor running in production... alongside a separate REST Rails API
- No documentation 😱
- Bugs everywhere
- Great opportunity to learn Meteor from scratch!

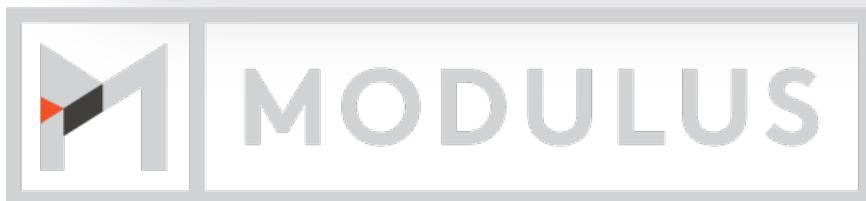
Meteor Impressed Me...

- Deep connection between client and server means better:
 - Reactivity
 - Security
 - Cross-domain HTTP
- Iron Router & Blaze are awesome
- NPM support
- Build system is really easy to work with

Deploying LeSalon



A screenshot of a macOS terminal window titled "meteor-app — -zsh — 59x7". The window shows the command "lesalon/meteor-app - [master] » modulus deploy" being typed into the terminal. The terminal interface includes standard OS X window controls (red, yellow, green) and a dark background.



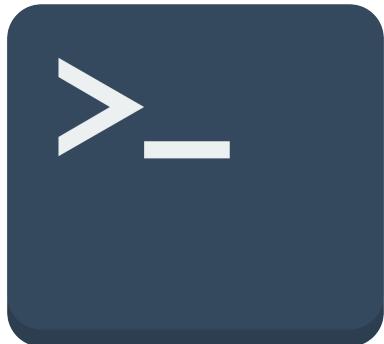
Slow but reliable manual process

Continuous Integration

- **Automated**
 - Less time spent doing deploys
- **Frequent**
 - Less integration pain
- **Safe**
 - Unit tests on every deploy
- **Codeship**
 - My favourite CI service
 - Others include Travis, GitLab, Shippable, etc.

Continuously Integrating Meteor

1



2



3



GitHub

Codeship Supports Modulus

lesalon > Select Project...

Docker Support Documentation Helpdesk Freeman Edit

Add another deployment to your pipeline

 Google AppEngine	 CodeDeploy	 Capistrano	 dotCloud
 Amazon Elastic Beanstalk	 Engine Yard	 heroku	 MODULUS
 nodejitsu	 Amazon S3	\$ Custom Script	

Pretty easy...

Modulus

Run **modulus token create** on your machine to create a new token. You can read more about this in the [Modulus Documentation](#).

API Token:

We will check if the project exists and create it if it doesn't.

2

Project Name:

URL:

If this URL requires HTTP Basic Auth, enter
http://USERNAME:PASSWORD@YOUR_URL into the url field

Create Deployment

 Cancel

Deploy by push / merge to master

New pull request



Fire and forget! Codeship's
internet is obviously better than
my China Telecom 100M line

lesalonapp/meteor-app: avatar support
nabilfree... b5b7ddcc master 5:48 2016-08-05 SUCCESS

TEST COMMANDS

1 Exporting Environment	0 min 1 sec	✓
2 git clone --branch "master" --depth 50 git@github.com:lesalonapp/meteor-app.g...		✓
3 cd clone	0 min 1 sec	✓
4 git checkout -qf b5b7ddcc01ff5a120fc6037cce1649b9aea738e	0 min 1 sec	✓
5 Preparing Dependency Cache	0 min 5 sec	✓
6 Preparing Virtual Machine	0 min 12 sec	✓
7 npm install -g modulus	0 min 14 sec	✓
8 Export Modulus Token	0 min 1 sec	✓
9 Ensuring project lesalon-webapp exists	0 min 2 sec	✓
10 modulus deploy -p "lesalon-webapp"	8 min 28 sec	✓

Welcome to Modulus
You are logged in as nabil@instafork.com
Selecting lesalon-webapp

Deploying Meteor version 1.3.2.4

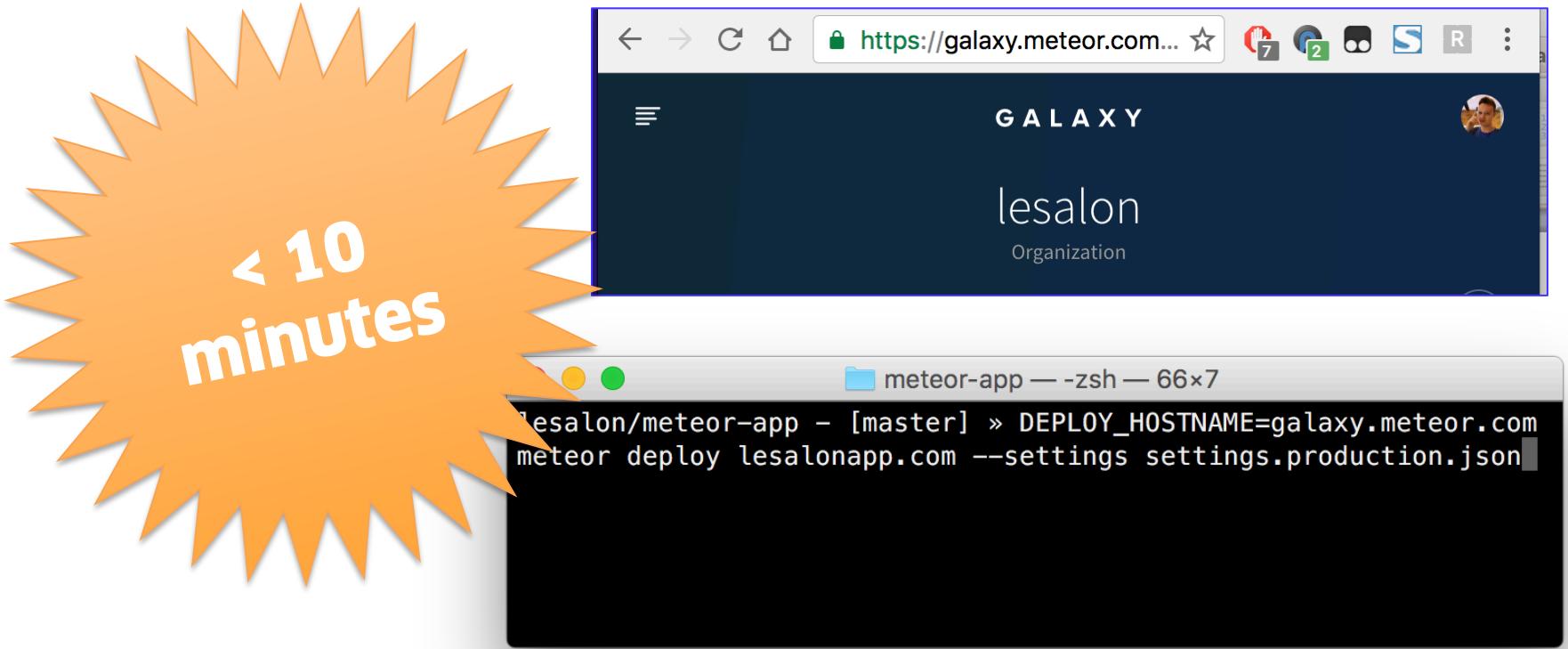
Compressing project...

Logs ...

[] lesalon-webapp running at lesalonwebapp-48396.onmodulus.net

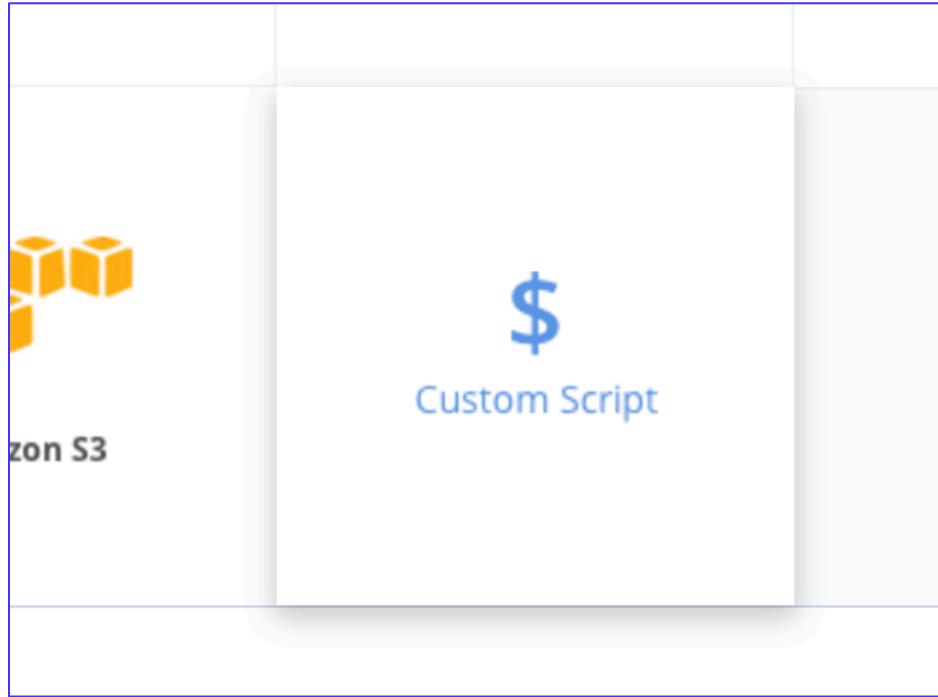
11 check_url lesalonapp.com	0 min 12 sec	✓
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The Official PaaS: Galaxy



Faster (no demeteorizer) and built in to the Meteor command line tools

Codeship Doesn't Support Galaxy



Time to get our hands dirty

Thanks Nate Strauser!



[Sign in](#) / [Sign up](#)



Nate Strauser

Meteor Consultant and Mentor—natestrauser.me

Dec 12, 2015 · 7 min read

Migrating Meteor Apps from Modulus to Galaxy with Continuous Deployment from Codeship

Galaxy is the new hosting offering from Meteor Development Group. The business editions have been publicly available for a little while, but they are too expensive for

...for your excellent tutorial on Medium ([link](#) in Meteor WeChat group)

Just add something to settings.json...

```
{
  "galaxy.meteor.com": {
    "env": {
      "NODE_ENV": "staging",
      "ROOT_URL": "https://staging.lesalonapp.com",
      "MONGO_URL": "mongodb://some: mongo@data/base"
    }
  },
  "public": {
    "segment_key": "fdhskslhflfdkhkldshkl",
    "stripe_key": "pk_test_fdslhflkdhklf",
    "app_name": "web-app-staging",
    "environment": "staging"
  },
  "private": {
    "stripe_key": "sk_test_sdfiodhlfkleewio",
    "facebook": {
      "key": "fdsgosilkdsfl",
      "secret": "fdsgosilkdsfl"
    }
  }
}
```

Create an auth token...

We now need to create a login session **token** file to allow Codeship to deploy to Galaxy without having to supply your username and password.

Create a Meteor session **token** in a json file by running this command locally

```
METEOR_SESSION_FILE=deployment_token.json meteor login
```

This will create session **token** with Meteor's authentication system and store it in a json file `deployment_token.json`. If needed, the **token** can be revoked from your Meteor user account settings. The **token** stored in the file looks like

Pretty hard...

Custom script

Enter your custom deployment script line by line. Disable them by putting `#` at the beginning of a line

Deployment Commands:

```
# install node modules
npm install

# install Meteor
curl -o meteor_install_script.sh https://install.meteor.com/
chmod +x meteor_install_script.sh
sed -i "s/type sudo >/dev/null 2>&1/\ false /g" meteor_install_script.sh
./meteor_install_script.sh
export PATH=$PATH:~/.meteor/

# deploy app
DEPLOY_HOSTNAME=eu-west-1.galaxy-deploy.meteor.com METEOR_SESSION_FILE=deploy.token.json meteor deploy
staging.lesalonapp.com --settings settings.staging.json
```

2

Each line is like a command that you execute in a local shell from within the project path.

Create Deployment

...But worth it!!!

New pull request



Fully automated

lesalonapp/meteor-app: Merge pull request #102 ...
nabilfree... 357089a4 master 9:49 2016-11-16 SUCCESS C

TEST COMMANDS ✓

1 Exporting Environment	0 min 3 sec	✓
2 git clone --branch "master" --depth 50 git@github.com:lesalonapp/meteor-app.g...		✓
3 cd clone	0 min 1 sec	✓
4 git checkout -qf 357089a4d74adba90f3786ec8e1c161ff129c453	0 min 2 sec	✓
5 Preparing Dependency Cache	0 min 8 sec	✓
6 Preparing Virtual Machine	0 min 14 sec	✓
7 npm install	0 min 3 sec	✓
8 curl -o meteor_install_script.sh https://install.meteor.com/	0 min 1 sec	✓
9 chmod +x meteor_install_script.sh	0 min 1 sec	✓
10 sed -i "s/type sudo >VdevVnull 2>&1\& false /g" meteor_install_script.sh	0 min 1 sec	✓
11 ./meteor_install_script.sh	0 min 9 sec	✓
12 export PATH=\$PATH:~/.meteor/	0 min 1 sec	✓
13 sh deploy.production.sh	6 min 15 sec	✓

Deploying app with the following settings:
{
 "galaxy.meteor.com": {
 "env": {
 "NODE_ENV": "production",
 "ROOT_URL": "https://lesalonapp.com",
 "MONGO_URI": "
 request: updating npm dependencies -- request...
 Deploying your app...
 Upgrading lesalonapp.com to version 28 in lesalon's account in
 eu-west-1.
 Visit https://eu-west-1.galaxy.meteor.com/app/lesalonapp.com to check the
 status of your app.

Logs ...

```
request: updating npm dependencies -- request...
Deploying your app...
Upgrading lesalonapp.com to version 28 in lesalon's account in
eu-west-1.
Visit https://eu-west-1.galaxy.meteor.com/app/lesalonapp.com to check the
status of your app.
```

Notes

- From 20 minutes supervised deploys to 6 minutes automatic. Great success!
- settings.json needs to be in source control and contains sensitive information (might not be acceptable for some teams)
- This uses Galaxy, but you could also hack this to work with Meteor Up for custom servers.
- Codeship supports tests, but the Meteor app doesn't have any yet... 😊

Future Meteor Plans

- **Experiment with React framework instead of Blaze (we are transitioning to React Native for our mobile apps)**
- **Implement unit tests**
- **Look at front end testing with CasperJS**
- **Build a Meteor project from scratch (I inherited this one)**

Cheers! 🇬🇧

- WeChat me!
- <http://freemans.website>
 - (I'm a talented contractor)
- Suggestions to improve my CI setup are much appreciated

