# Getting started with Node.js, Mongoose and MongoDB Part 2



by Micha Hernandez van Leuffen - Jun 21 2013

wercker nodejs mongodb mongoose tdd javascript



This article is outdated. Please visit our <u>Dev Center</u>.

This is a followup from our <u>previous post</u> where we created an application with <u>node.js</u>, powered by <u>10gen's MongoDB</u>.

Not that we've set up our build pipeline with wercker, we are going to deploy our application to <u>Heroku</u> and use <u>MongoLab</u>, a MongoDB-as-a-Service cloud platform.

Archive »

Tags

Wercker (28)

Weekinreview (19)

Golang (17)

**Boxes** (16)

Opendelivery (15)

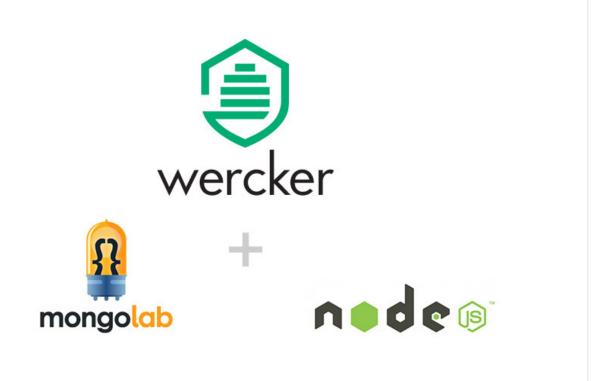
<u>Ui</u> (12)

<u>Deployment</u> (11)

Docker (10)

Design (9)

Python (9)



### Introduction

In our <u>previous post</u> we created a <u>node.js</u> application powered by <u>express</u> and <u>mongoose</u>, a object document mapper for <u>MongoDB</u>. We created this application using test-driven development using <u>Mocha</u> and <u>SuperTest</u>. This article is also available on our <u>dev center</u>

You can visit the finished application on wercker here.

The code to this tutorial app is open source on GitHub so feel free to fork and clone it.

Now, let's deploy our app!

### Deploying our app

We will deploy our application to Heroku, so make sure you have a (verified) <u>Heroku</u> account and have installed the <u>Heroku Toolbelt</u>. Let's first create an app:

Nodejs (8) <u>Steps</u> (8) Heroku (6) Announcement (5) Github (5) Django (5) <u>Git</u> (5) Android (5) <u>Ruby</u> (5) Containers (5) <u>S</u><sub>3</sub> (4) Javascript (4) Structure (4) <u>Jekyll</u> (3) Rethinkdb (3) Funding (3) <u>API</u> (3) **Ewok** (3) <u>Cli</u> (3) <u>Aws</u> (3) Pipeline (3) PostGIS (3) Gigaom (2) Linuxcontainers (2) <u>Paas</u> (2) Bitbucket (2)

```
<u>Api</u> (2)
  heroku create
                                                                       Maintenance (2)
  Creating guarded-atoll-9149... done, stack is cedar
  http://guarded-atoll-9149.herokuapp.com/ | git@heroku.
                                                                       Couchdb (2)
  Git remote heroku added
                                                                       Caching (2)
                                                                       Contributions (2)
                                                                       <u>Internals</u> (2)
Now we need a MongoDB instance in the cloud! Fortunately,
Heroku has a Marketplace (wercker is on it by the way)
                                                                       Mongodb (2)
filled with addons. One of which are our friends at
                                                                       Mongoose (2)
Mongolab, so let's use their add-on to provision a MongoDB
                                                                       <u>Tdd</u> (2)
database:
                                                                       Devcenter (2)
                                                                       Hires (2)
                                                                       Flask (2)
  heroku addons:add mongolab
                                                                       Redis (2)
  Adding mongolab on guarded-atoll-9149... done, v3 (free
  Welcome to MongoLab. Your new subscription is ready for
                                                                       Gocov (2)
  Use `heroku addons:docs mongolab` to view documentation
                                                                       Codecoverage (2)
                                                                       Compass (2)
For our test environment we used the
                                                                       Sass (2)
WERCKER_MONGODB_HOST environment variable that was
                                                                       Buildsteps (2)
provided by wercker and was defined through the
                                                                       Security (2)
wercker.yml . We now need a similar environment variable
                                                                       Badges (2)
for our production setting which is powered by Heroku and
                                                                       Notifications (2)
Mongolab. We can retrieve this environment variable, again
                                                                       Evangelism (2)
via the Heroku command line interface:
                                                                       Geodjango (2)
                                                                       Capistrano (2)
  heroku config | grep MONGOLAB URI
                                                                       Building (2)
                                                                       <u>Php</u> (2)
  MONGOLAB URI: mongodb://heroku app3489u7438034:ofs0gfj
```

```
We now need to use this environment variable,
MONGOLAB_URI, in our actual application. Modify the
configure section in your app.js file in the following way:
  // Configure express
  app.configure('development', function() {
    mongoose.connect('mongodb://localhost/todos');
  });
  app.configure('test', function() {
    mongoose.connect('mongodb://'+ process.env.WERCKER_M(
  });
  app.configure('production', function() {
    mongoose.connect('mongodb://' + process.env.MONGOLAB
  });
Similarly to adding the NODE ENV=test environment
variable to wercker in the previous post, we need to do the
same for Heroku, but now of course NODE_ENV=production
as Heroku is our production environment.
                                                                   <u>Box</u> (1)
  heroku config:set NODE ENV=production
  Setting config vars and restarting guarded-atoll-9149.
  NODE ENV: production
```

```
We now have succesfully set up our production environment consisting of Heroku and MongoLab.
```

```
<u>Dart</u> (2)
Meteor (1)
Collaboration (1)
Addon (1)
Cloud (1)
Sidebar (1)
Seedround (1)
<u>Digitalocean</u> (1)
Walter (1)
<u>Deploykeys</u> (1)
<u>Dockerfile</u> (1)
Selenium (1)
Hipchat (1)
Provisioning (1)
Awards (1)
<u>Xmas</u> (1)
<u>Riak</u> (1)
Ricon 2013 (1)
Service (1)
Database (1)
Open Source (1)
Pullrequests (1)
Tutorial (1)
<u>Go</u> (1)
Golang (1)
```

## Creating a Heroku Procfile

Heroku needs to know which process to run on their cloud platform to actually launch your application. This is done throught the Heroku <u>Procfile</u>.

Create a file called Procfile in your project directory with the following line of code:

```
web: node app.js
```

Let's add this file to our repository and push it to our version control system:

```
git add Procfile
git commit -am 'added Procfile'
git push origin master
```

This will trigger a new build on wercker (which should pass as we didn't change anything dramatic) and we're now ready to deploy our application.

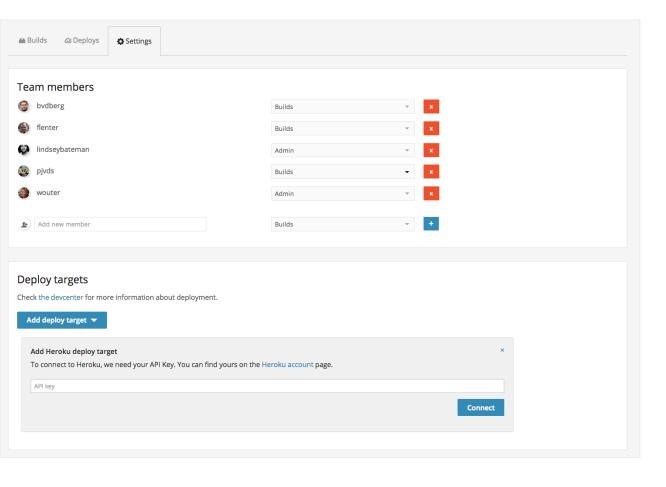
### Add deploy target

First, we add a deploy target. Go to your settings tab for your application on wercker and look for the **deploy targets** section. Although wercker has an [add-on] on the Heroku Marketplace, making deployment even easier, we are going

```
<u>Chef</u> (1)
Werckeryml (1)
 Mesosphere (1)
 Marathon (1)
 Mesos (1)
 Store (1)
 Osx (1)
<u>Mac</u> (1)
 Node-Webkit (1)
 Private Repositories (1)
<u>RVM</u> (1)
Registrations (1)
 Bundle (1)
 <u>Npm</u> (1)
<u>Pip</u> (1)
<u>Docs</u> (1)
 <u>Rails4</u> (1)
 Rails (1)
<u>Ux Design Foundation</u>
(1)
 Continuous
<u>Deployment</u> (1)
Videos (1)
 Chrome (1)
 <u>Css</u> (1)
 Animation (1)
```

Fabric (1)

to add Heroku manually as a deploy target.



As the page indicates, retrieve your Heroku API key from your Heroku Dashboard and paste it in the form. Next, you are presented with a form where you can *name* your deploy target (let's go with *production*) and are able to auto deploy specific branches. We've previously written a post on autodeployment here. We are also able to either select an existing Heroku app that we want to deploy to, or create one. I'm going to pick the application I've previously created using the heroku create command and to which I've also added the MongoLab add—on

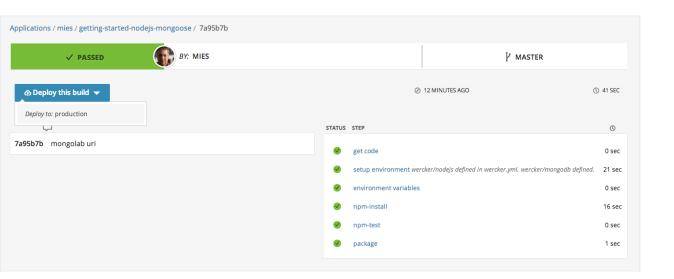
Ec2 (1) Openshift (1) Redhat (1) <u>Gems</u> (1) <u>Development</u> (1) **Kubernetes** (1) Minimal (1) Coreos (1) **Quay** (1) Scratch (1) Testing (1) Node (1) Browser (1) <u>Pypi</u> (1) <u>Ssh</u> (1) Local (1) <u>Devmode</u> (1) Suchdevwow (1) Fortrabbit (1) Status (1) <u>Svg</u> (1) Retina (1) Campfire (1) Amazon (1) <u>ECS</u> (1) <u>Deployment</u> (1)

d deploy target ▼		
oduction <i>(heroku)</i>		<b>☼</b> Edit <b>★</b> Remove
Currently running: deployed b	uild <i>by</i> mies, on <i>June 20 2013, 1:17:55 pm</i>	
Edit Heroku deploy target		×
Deploy target name	production	
Auto deploy	Caute depley suggestful builde to broughten).	
	auto deploy successful builds to branch(es):  branch names (seperated with spaces)	
	note: builds from all teammembers on the specified branch(es) will deploy.	
Heroku app name	guarded-atoll-9149	<b>\$</b>
	Create new Heroku app	
Environment variables	+ Add new variable	
:nvironment variables	▼ Add new variable	
		Save

Let's deploy our application!

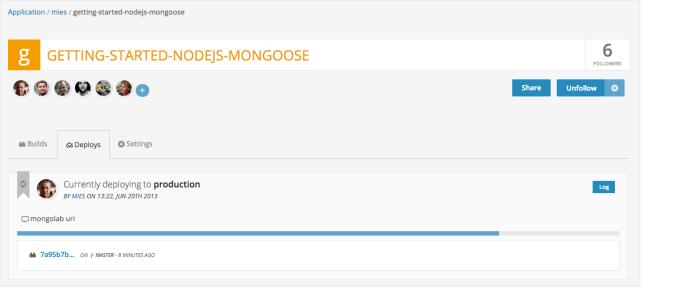
### Deploying our application

Go to the latest green build on wercker and hit the *deploy*this build button. A pull down menu will appear and you can select the target ('production') that you've just created,

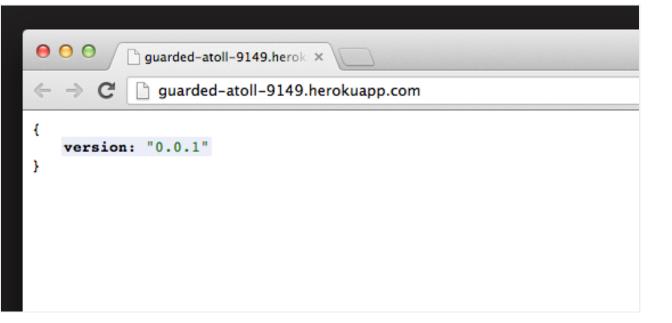


If you go to the **deploys** tab you can see your deploy in action:

**Automation** (1) <u>Documentation</u> (1) Organization (1) <u>Usecase</u> (1) Pivotal (1) Organizations (1) <u>Flow</u> (1) <u>Blog</u> (1) Modules (1) <u>Node.js</u> (1) Dokku (1) <u>Digital Ocean</u> (1) <u>Developers</u> (1) <u>Logo</u> (1) Lookandfeel (1) Middleman (1) Heartbleed (1) Endpoint (1) <u>Build</u> (1) Ansible (1) <u>Vagrant</u> (1) Windows (1) .Net (1) Dotnet (1) <u>C</u># (1) Azure (1)



If we visit the root of our application on Heroku we can see it in action:



Congratulations! You've successfully built a REST API using test-driven development and leveraged wercker for continuous delivery. Subscribe to the <u>feed</u> of our blog and follow us on <u>twitter</u> for more updates.

# Earn some stickers!

Let us know about the applications you build with wercker.

Don't forget to tweet out a screenshot of your first green build with **#wercker** and we'll send you some <u>@wercker</u> stickers.

```
Capgemini (1)
Apollo (1)
Continuous Integration
Puppet (1)
Bundler (1)
Slack (1)
Services (1)
Docker (1)
Termie (1)
Logging (1)
<u>Logs</u> (1)
Guestpost (1)
Services (1)
AppEngine (1)
Statistics (1)
Marketplace (1)
Builds (1)
Filter (1)
<u>Devopsdays</u> (1)
Conference (1)
Amsterdam (1)
\underline{\mathbf{U}\mathbf{x}} (1)
Menu Bar (1)
<u>Css</u>3 (1)
Css-Animation (1)
```

Product Design (1)

