ppyordanov / **Dynamic-Noise-and-Pollution-Map**   PRIVATE

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Server Configuration #59

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ⓧ **Closed**   **ppyordanov** opened this issue on Dec 7, 2014 · 5 comments

ppyordanov commented on Dec 7, 2014

The server of the application needs to be configured in order to enable web application deployment. The chosen hosting provider is the cloud-based Digital Ocean:

https://www.digitalocean.com/

🏷 PY **ppyordanov** added the enhancement label on Dec 7, 2014

👤 PY **ppyordanov** self-assigned this on Dec 7, 2014

PY **ppyordanov** added this to the **Mobile Web Application** milestone on Dec 7, 2014

ppyordanov commented on Dec 7, 2014

The configuration involved installing the main system environment requirements. Some of the steps required significant trial and error as there is poor documentation for some software facets and the existing tutorials on the website (https://www.digitalocean.com/community/tutorials) are deprecated:

//The main terminal window was used for the execution of most of the operations although it would have been much more flexible to enable users to open multiple bash consoles especially when deploying new features/components:

- I installed Java Runtime Environment (JRE) and Java Development Kit 1.7 (JDK).

- Git was the next on the list in order to facilitate quick and flexible component update registration on the server directly from the remote Github repository.

- The following step involved installing Apache to see that the server is functioning as expected. After setting up Apache2 I rebooted the whole system to make sure it is running ok and verified the installation: http://178.62.100.239/

- Mongo DB needed to be installed to enable the Spring MVC application to connect to its designated data source. This step took the most time as the tutorial on the official website is deprecated:

  - I first installed a bash script from one of the tutorials for setting up a scalable Mongo DB instance; however, even after specifying the *data/db/* directory as the `--dbpath` configuration parameter, used a different port (`--port 8015`) and changed the directory/file permissions to public for testing purposes (`sudo chmod 777 -R /var/www/data/`) the issue still persisted; the error message stated that no */data/db* directory mapping could be resolved. After a lot of trial and error I managed to discover the issue and it was that the installation instructions had were installing only the client application. I tried to reinstall Mongo DB using an alternative method - via the **yum** package (http://yum.baseurl.org/) instead of the conventional `apt-get` :

    - modified /etc/apt/sources.list by adding:

      - deb http://downloads-distro.mongodb.org/repo/ubuntu-upstart dist 10gen

Labels   ⚙
enhancement

Milestone   ⚙
Mobile Web Applic...

Assignee   ⚙
PY ppyordanov

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1 participant
PY

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- added the public gpg key:
  - `sudo apt-key adv --keyserver keyserver.ubuntu.com --recv 7F0CEB10`
- updated the aptitude repos:
  - `sudo aptitude update`
- tried to install the server:
  - `yum -y install mongo-10gen mongo-10gen-server`

This did not solve the issue as yum found broken packages during installation ("faulty dependency resolution /requires bin/sh/"). Using **--skip -broken** did not help either as it entirely discarded the mongo-db server installation and only reinstalled the client, which was working without issues before.

I decided to resort back to the manual configuration approach. Once I manually modified the bash script I was running to also install the server as specified on Mongo DB's website with a little tweaking (http://docs.mongodb.org/manual/reference/program/mongod/#bin.mongod), the database started running like a charm. Here is the final *mongo.bash* script:

```
apt-key adv --keyserver keyserver.ubuntu.com --recv 7F0CEB10
echo "deb http://downloads-distro.mongodb.org/repo/ubuntu-upstart dist 10gen" | tee -a /etc/apt/sou
apt-get -y update
apt-get -y install mongodb-org


sudo apt-key adv --keyserver hkp://keyserver.ubuntu.com:80 --recv 7F0CEB10
echo 'deb http://downloads-distro.mongodb.org/repo/ubuntu-upstart dist 10gen' | sudo tee /etc/apt/s
sudo apt-get update
sudo apt-get install mongodb-org-server
```

I configured it to automatically start on server power-on. Even the instructions for this are deprecated on the tutorial page (https://www.digitalocean.com/community/tutorials/how-to-set-up-a-scalable-mongodb-database). The recommended tool for the purpose is **chkconfig** which is no longer supported on Ubuntu. An analogue (as recommended on StackOverflow) is **sysv-rc-conf** which was used to configure the system for automatic DB instance initialization at startup:

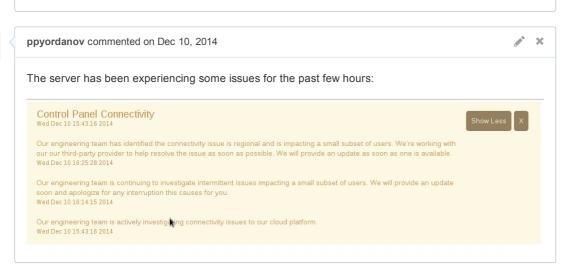- `sysv-rc-conf mongod on && service mongod start`

With all of the steps above completed, the initial server configuration was complete. Not great first impressions of DigitalOcean, but will be using the cloud hosting as it is flexible and the best hosting option at the moment.
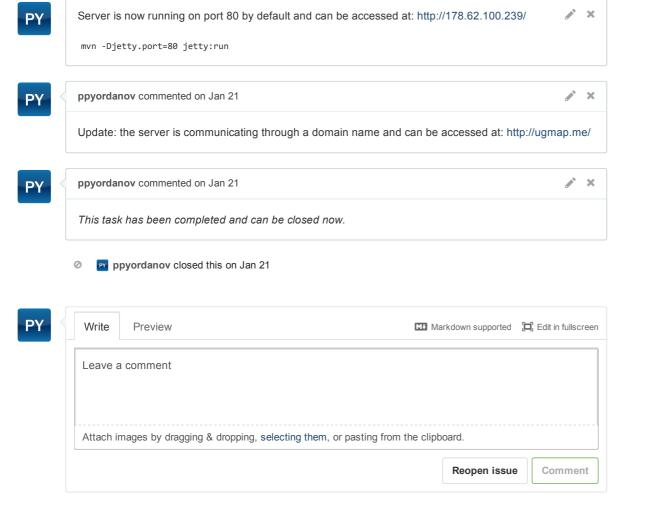
Some of the guides on the official website that were used can be seen below:

- https://www.digitalocean.com/community/tutorials/how-to-install-java-on-ubuntu-with-apt-get
- https://www.digitalocean.com/community/tutorials/how-to-install-git-on-ubuntu-14-04
- https://www.digitalocean.com/community/tutorials/how-to-set-up-a-scalable-mongodb-database

Question posted on DC's community forum seeking advice on how to proceed with DB setup (I did not find any questions about Spring MVC and Java WAF questions seem to be a rarity; most of the support provided is for Python-based systems such as Django as it looks like):

- https://www.digitalocean.com/community/questions/spring-mvc-nosql-server-setup

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PY

ppyordanov commented on Dec 10, 2014

The server has been experiencing some issues for the past few hours:

Control Panel Connectivity
Wed Dec 10 15:43:16 2014

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Our engineering team has identified the connectivity issue is regional and is impacting a small subset of users. We're working with our our third-party provider to help resolve the issue as soon as possible. We will provide an update as soon as one is available.
Wed Dec 10 16:25:28 2014

Our engineering team is continuing to investigate intermittent issues impacting a small subset of users. We will provide an update soon and apologize for any interruption this causes for you.
Wed Dec 10 16:14:15 2014

Our engineering team is actively investigating connectivity issues to our cloud platform.
Wed Dec 10 15:43:16 2014

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ppyordanov commented on Dec 11, 2014

Server is now running on port 80 by default and can be accessed at: http://178.62.100.239/

```
mvn -Djetty.port=80 jetty:run
```

ppyordanov commented on Jan 21

Update: the server is communicating through a domain name and can be accessed at: http://ugmap.me/

ppyordanov commented on Jan 21

This task has been completed and can be closed now.

PY **ppyordanov** closed this on Jan 21

Write | Preview   M↓ Markdown supported   ⊡ Edit in fullscreen

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