



Déployez Pur Beurre

Projet 10 – Développeur d'applications Python



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 - Services
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Le serveur



- Hebergeur : Digital Ocean
- Droplets sous Debian
- Sécurisé par firewall
 - Iptables
 - Fail2ban
- Mises à jour automatiques



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L'application

Application sous Docker – Lancement par docker-compose



Conteneur : db

- PostgreSQL



Conteneur : purbeurre

- Apache
- Django



Conteneur : ocp

- httpd

- Site attente
- Conteneur standard sur docker-hub
- Démarré pendant MàJ site PurBeurre

Avantages :

- Simplicité mise en œuvre et maintenance (Docker-hub)
- Uniformisation environnements (Développement et Production)
- Évolutivité plate-forme...



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L'intégration continue

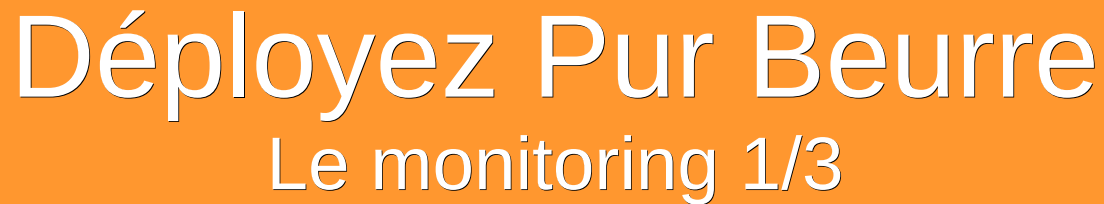


Travis-CI

- 1 branche Github spécifique : CI
- Tests Selenium avec Driver Gecko (Firefox)
- Utilisation Settings.py spécifique
- Tests lancés par manage.py test
→ pas d'interaction avec la production

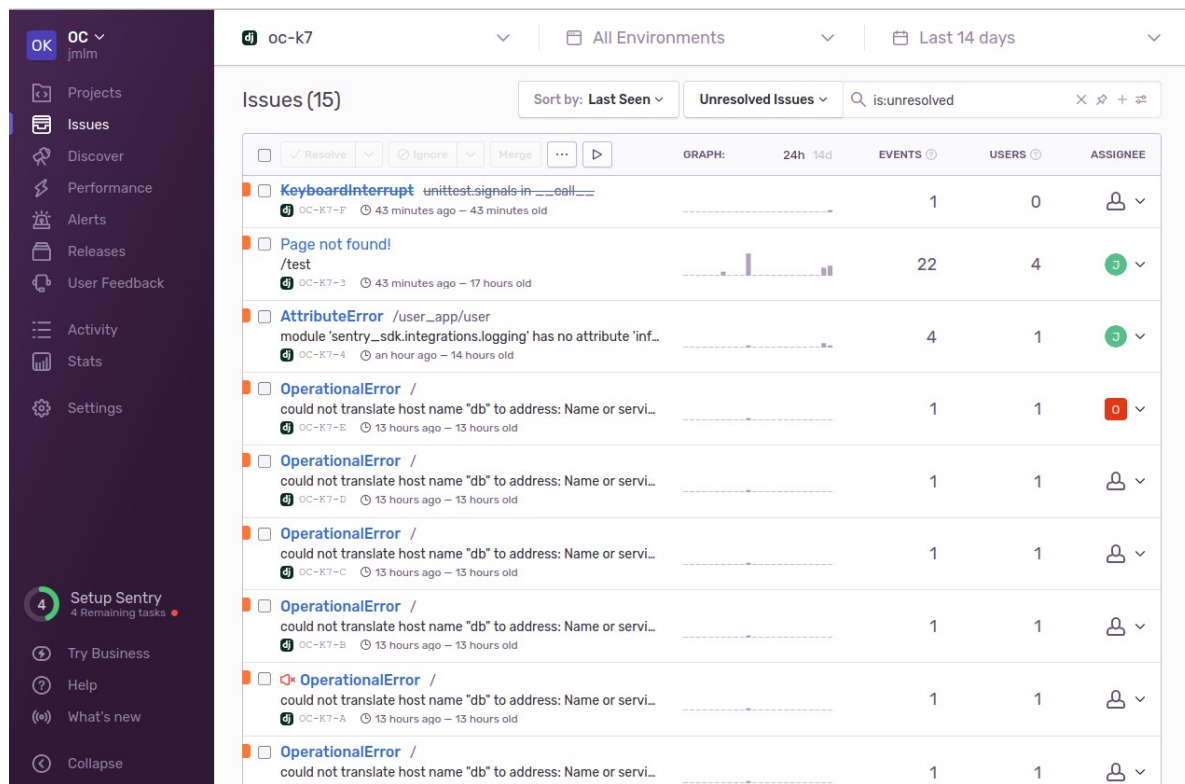
The screenshot displays the Travis CI dashboard for the repository 'jmlm74 / P10-Deployez'. The interface includes a search bar, navigation tabs for 'My Repositories', 'Current', 'Branches', 'Build History', and 'Pull Requests', and a 'More options' menu. The 'Build History' tab is active, showing a list of builds with their status, commit hash, duration, and completion time.

Status	Commit	Message	Result	Duration	Time
✓ CI	jmlm74	remove sentry in dev settings and travis settings	#7 passed	1 min 28 sec	11 minutes ago
✗ CI	jmlm74	finale for sentry	#6 failed	1 min 35 sec	36 minutes ago
✓ CI	jmlm74	Add Sentry - GRRRR - Save new settings	#5 passed	1 min 30 sec	17 hours ago
✓ CI	jmlm74	remove migrations in Dockerfile	#4 passed	1 min 33 sec	3 days ago
✓ CI	jmlm74	change in settings.py - remove old module	#3 passed	1 min 35 sec	3 days ago



Le monitoring de l'application

- Effectué via Sentry
- Modification du settings.py de production pour ajouter Sentry
- Permet de remonter les erreurs
- Permet de remonter directement des exceptions

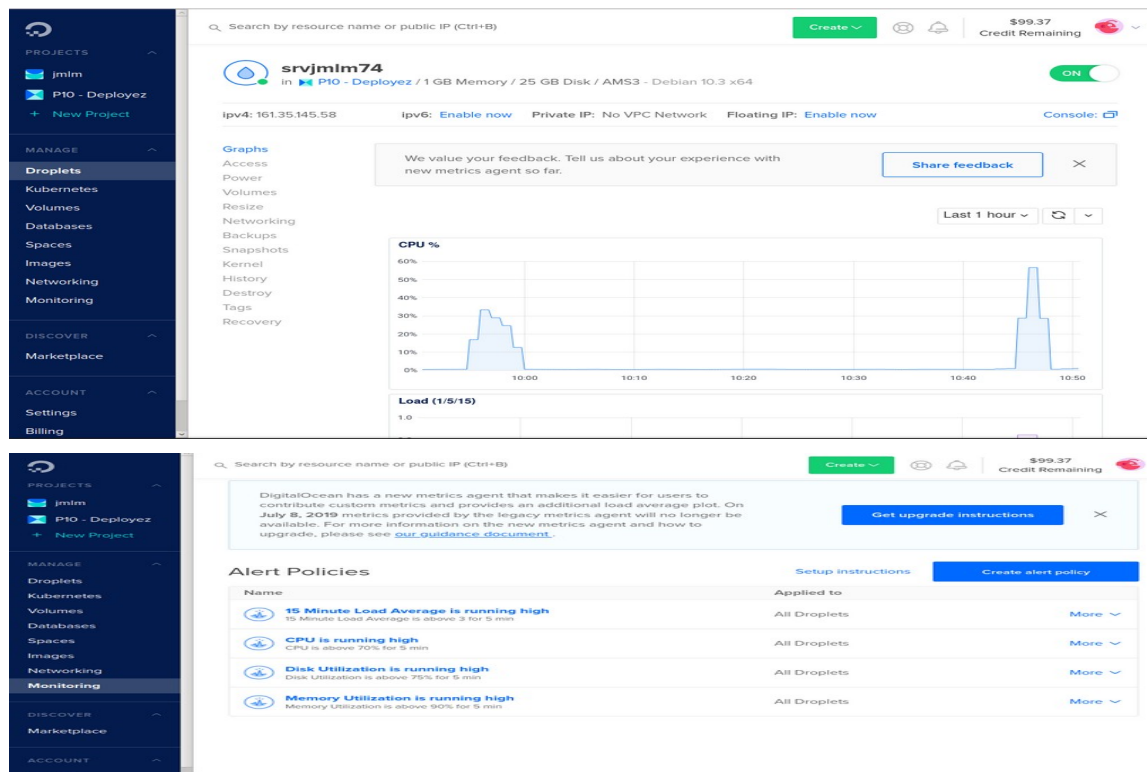


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Le monitoring 2/3

Le monitoring du serveur

- Monitoring serveur garanti par hébergeur
- Différents « metrics » tels que CPU, load average...
- Possibilité d'alertes via mail sur dépassement de seuils



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Le monitoring 3/3

Le monitoring des services

- Assuré par un script shell lancé toutes les 10 mn par crontab
- Surveille les ports SSH – HTTP/HTTPS – Postgresql
- Envoi mail si un des ports n'écoute plus (basé sur les outils systèmes standards : netstat)

```
# Edit this file to introduce tasks to be run by cron.
##
## Each task to run has to be defined through a single line
## indicating with different fields when the task will be run
## and what command to run for the task
##
## To define the time you can provide concrete values for
## minute (m), hour (h), day of month (dom), month (mon),
## and day of week (dow) or use '*' in these fields (for 'any').
##
## Notice that tasks will be started based on the cron's system
## daemon's notion of time and timezones.
##
## Output of the crontab jobs (including errors) is sent through
## email to the user the crontab file belongs to (unless redirected).
##
## For example, you can run a backup of all your user accounts
## at 5 a.m every week with:
## 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
##
## For more information see the manual pages of crontab(5) and cron(8)
##
# m h dom mon dow command
*/10 * * * * /root/monitor.sh >/dev/null
30 04 * * 1 /home/purbeurre/docker_maj.sh
00 05 * * 1 docker exec purbeurre python3 manage.py init_db
```



jmlm74 jmlm74@gmail.com

Attention : service down @ srvjmlm74

Bcc: jmlm74 jmlm74@gmail.com

jeudi ☆ ⋮

Running services status @ **srvjmlm74** [jeudi 20 août 2020, 08:36:12 (UTC+0000)]

SSH	: YES
HTTP	: YES
HPTTSPS	: YES
POSTGRES	: NO

This is an automatically generated Linux service status notification by /root/monitor.sh script.

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Autres / Divers 1/2

Crontab

```
# m h dom mon dow   command
*/10 * * * * /root/monitor.sh >/dev/null
30 04 * * 1 /home/purbeurre/docker_maj.sh
00 05 * * 1 docker exec purbeurre python3 manage.py init_db
```

- Monitoring services
- Maj conteneurs Docker
- Reinit base de données

```
# m h dom mon dow   command
30 04 * * * /home/purbeurre/docker_maj.sh
00 05 * * 1 docker exec purbeurre python3 manage.py init_db
root@srvjmlm74:/var/tmp# docker exec purbeurre python3 manage.py init_db
loading data started at 07:54:04
Init tables from OpenFoodFacts data
loading brand ferrero
loading brand coca cola
loading brand pepsi
loading category biscuits
loading category Crepes
loading category desserts
loading category sweetened-beverages
add users wishes
Update nb_prod in Category
loading data ended at 07:55:38
root@srvjmlm74:/var/tmp#
```

```
root@srvjmlm74:/var/tmp# /home/purbeurre/docker_maj.sh
ocp
docker-compose stop
Stopping purbeurre ... done
Stopping db ... done
lancement site d attente
06eea60aae8aea75640e6b4d121f3262b57107c32c7939ac61b0d8850323827f
docker-compose rm -f
going to remove purbeurre, db
Removing purbeurre ... done
Removing db ... done
docker system prune -a -f
Deleted Networks:
purbeurre_default

Deleted Images:
untagged: jmlm74/p10-deployez:latest
untagged: jmlm74/p10-deployez@sha256:ee453e0508998a80ec9006f7f12c5d067f0a08c8fbec9e5a70997c011ec57f985
deleted: sha256:65f62e20236633e54523503491b40cc3501649c557a32f69b35f15b538325f4e
deleted: sha256:814d894b7e69a3aa1c059ce743257600a4fe1fdd51a8bb4f95f07ef77794b790
deleted: sha256:5a95665179e01992db31c22ee4bff357a8b6aba48a1ddd858445a6bd170502c4
deleted: sha256:d635a114463be073f1f549418fe0321326225c9d31036f73440c0c19853734c4
deleted: sha256:f3e590049f93eda03255cd84bb6a73a39435e857375c2697d8e5a57c691c8528
deleted: sha256:04fad69112d26852a8b6279e6e60d8a2c4ead5314688c4408df9dd7223d3f7f
deleted: sha256:42780d399456f7cf52425dc0b3b05f080fa6cae2bf9affa3ad846b70bb998a04
deleted: sha256:cf6869157a9586cad1140de1ebbf5ef9a46c2dc9be0ed4b6fc5b32a77d0987
deleted: sha256:7515ee845913c8df9826c988341a09e0240e291c66bd436a067e070d7910a1f
deleted: sha256:50ebe6a0675f1ed7ca499a2ec7d8cc993d495dd66ca1035c218ec5efcb6fb8c
deleted: sha256:2515e0ecfb82d58c004c4b53fcf9230d9eca8d0f5f823c20172be01eec587ccb
deleted: sha256:ce30112909569cead47eac188789d0cf95924b166405aa4b71fb500d6e4ae08d
untagged: postgres:latest
untagged: postgres@sha256:9f325740426d14a92f71013796d98a50fe385da64a7c5b6b753d0705add05a21
deleted: sha256:624733707e0eaa08c9ad60273081a32452c5ba461314490b893c11021e01aefd
deleted: sha256:f0c8b7f0dccc5e645b8d22db67ba5f416c48d91e7741cabcb465de5f07fcb0887
deleted: sha256:7b47f4d8d705ecb5839f3909dc55945d88f6593f15c0d4684408ca53fc6d465a
deleted: sha256:d9cd3b0c9207b2b8dca88e206cd11d4732706bd6b6afdc5e3b5c155b4fbd2dc4
deleted: sha256:042413d8fd15c949bf3a9a16f8f38ada0839dd8d60cf8f65d5a577af51ff4a7e
deleted: sha256:e1686cb1e956f739d21354495f35a2ce2e711ce788d4726a562b282db06e534
deleted: sha256:47bf16a455f354cce0d67eee93d075bd6c34af92359041f18b9e0bbfb5ed7b1e
deleted: sha256:70d5161945f6517a9f9d0c6de648bd46c05fa503902b67c1744b6175c0457e89
deleted: sha256:6eb95aba59ba5fa631f7887988689f586946e159b93bde225156fc6007e7c42d
deleted: sha256:6e70564ad4f2cf44000d9e06930c599c3dea5a9582e20a3cd8081201f59029fd
deleted: sha256:aa381185a10a88406793f142641055c09ba1860bc30977c7567161387c977086
deleted: sha256:clae72a650da0f193e43c3a87a2cead27d5b4bab37e3d3dbcb075d2d98517c635
deleted: sha256:281f6cef13a202604231028390dc672e58ba00f690465af0312ff22a774a68c
deleted: sha256:3b8e1b9a4dd600428d730ff6c26277938ea0877e5cfd13d033ca35c4165183e
deleted: sha256:d0f104dc0a1f9c744b65b23b3fd4d4d3236b4656e67f776fe13f8ad8423b955c

Total reclaimed space: 1.083GB
docker-compose pull
Pulling db ... done
Pulling purbeurre ... done
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ocp
docker-compose up -d
Creating network "purbeurre_default" with the default driver
Creating db ... done
Creating purbeurre ... done
```




Déployez Pur Beurre

Autres / Divers 2/2



Docker-Hub

- Repositories officiels de logiciels tels que postgresQL – Apache – Ubuntu...
- Repositories « utilisateurs »
- Possibilité de lier à une branche d'un repository Github → build automatique au push git sur la branche
- Système de tag permettant de gérer différentes « branches » d'un même repository

The screenshot shows the Docker Hub interface for the repository `jmlm74/p10-deployez`. The page includes a search bar at the top, navigation tabs for Repositories, Builds, Timeline, Collaborators, Webhooks, and Settings. The repository page displays the name `jmlm74/p10-deployez`, a note that it does not have a description, and the last push time (3 minutes ago). On the right, there are Docker commands and a 'Public View' button. Below, the 'Tags' section shows two tags: 'latest' (pushed 17 hours ago) and 'Latest' (pushed 3 minutes ago). The 'Recent builds' section lists three builds: 'Build in 'master' (1cdc0cd0)', 'Build in 'CI' (38e4f5dd)', and 'Build in 'CI' (3aa08691)'.



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Q & A



Questions / Réponses