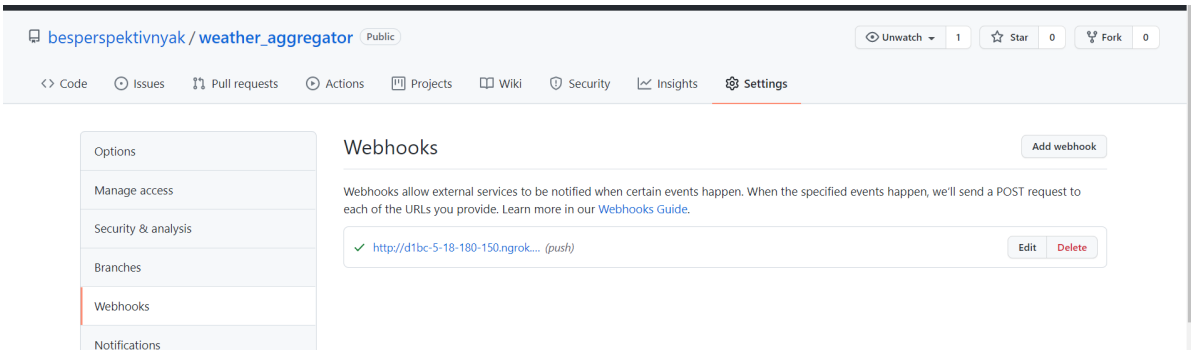
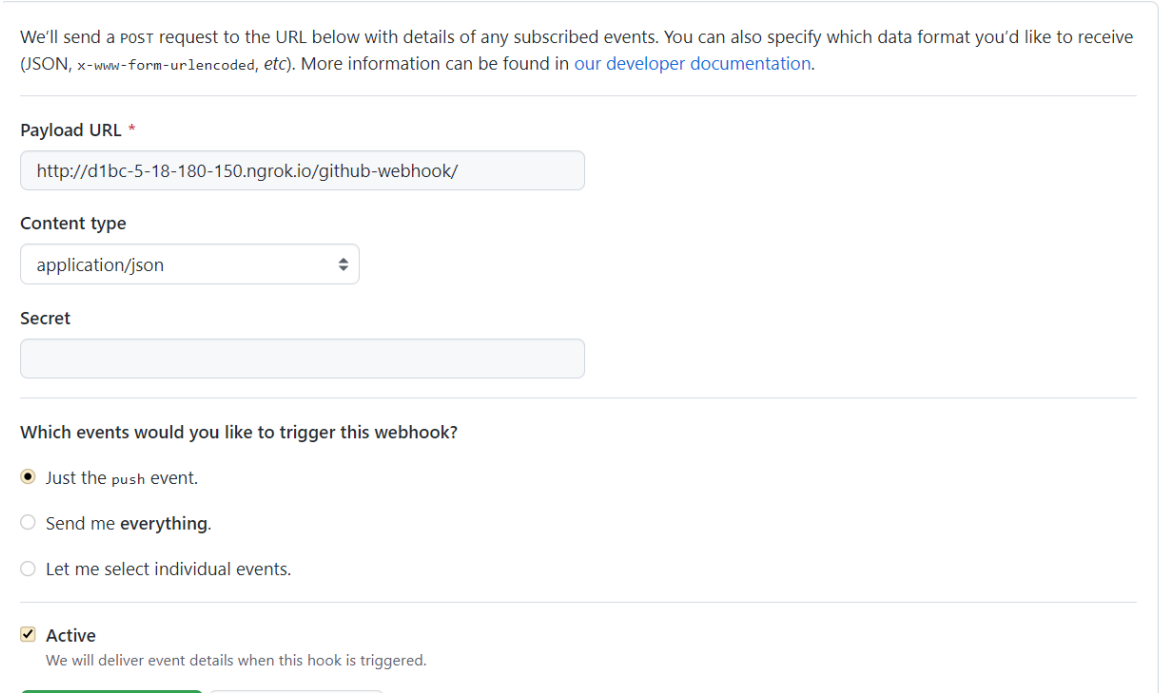
Manage pipeline

GitHub

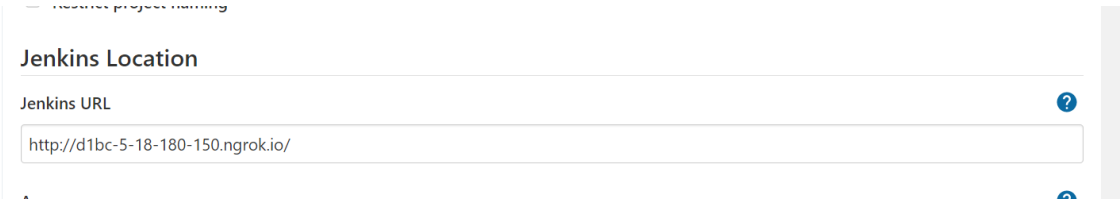
Add webhook to our project. As payload URL use generated by ngrok host.





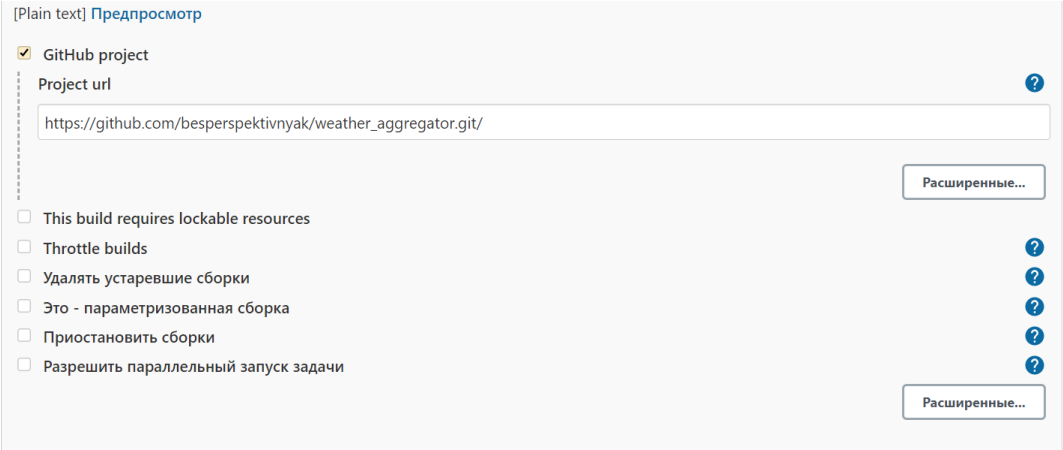
Jenkins

In Jenkins system configuration change Jenkins URL on ngrok host on previous step.

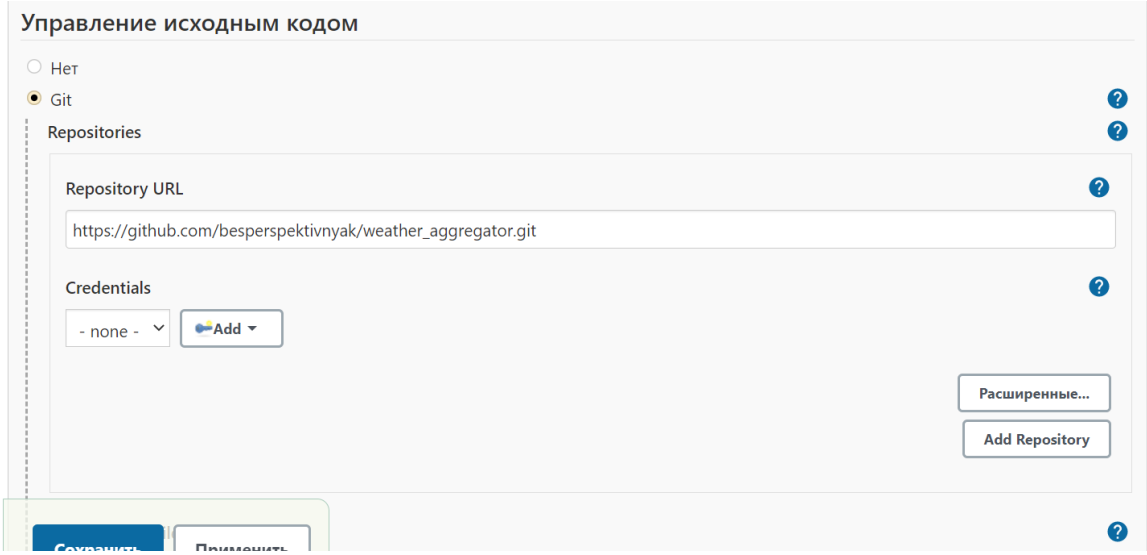


Then create freestyle project with following settings.

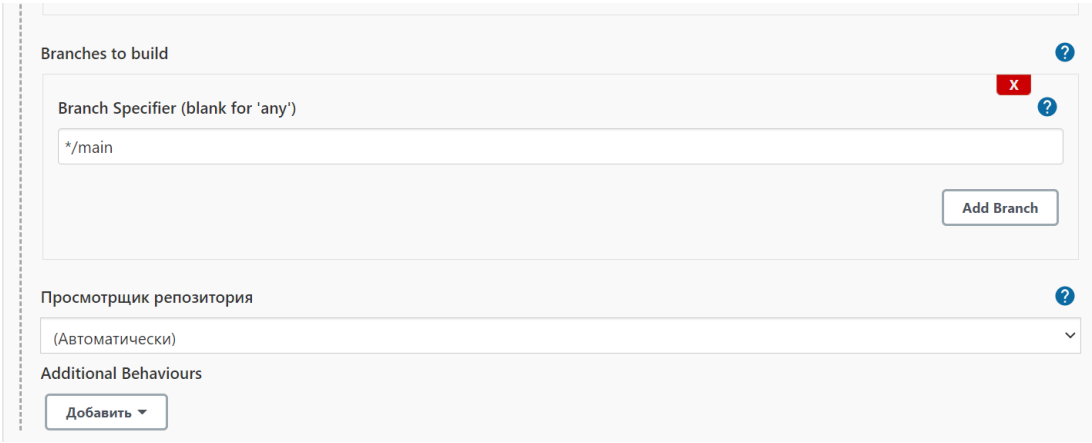
There is the link on your GitHub project.



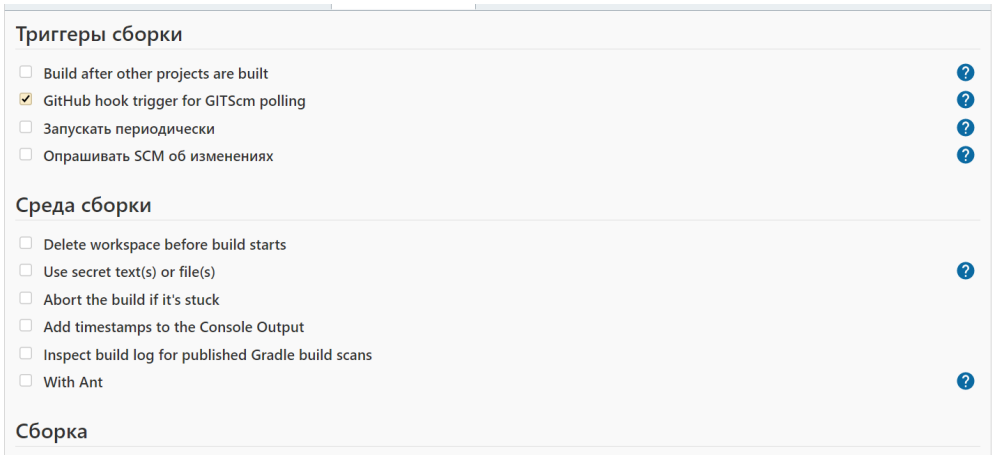
The same URL



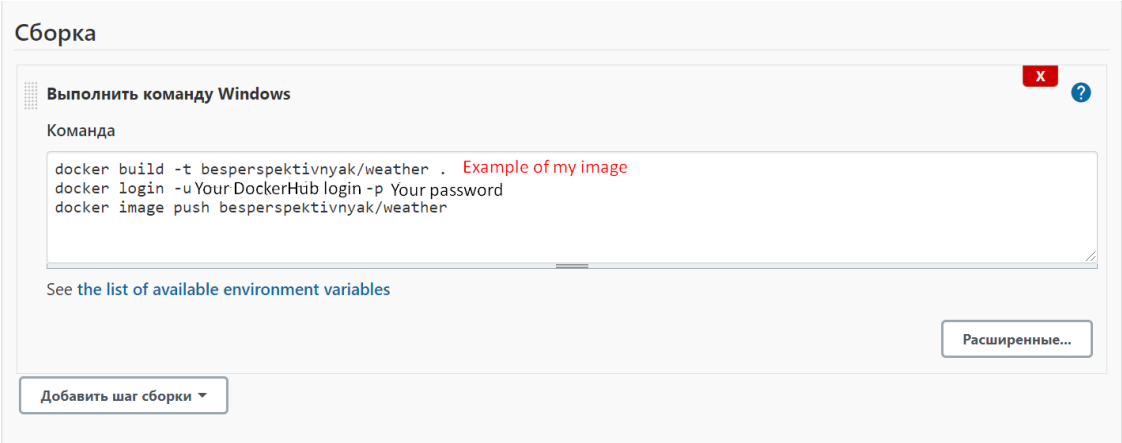
and name of branch



Our Jenkins project will be triggered by every GitHub push.



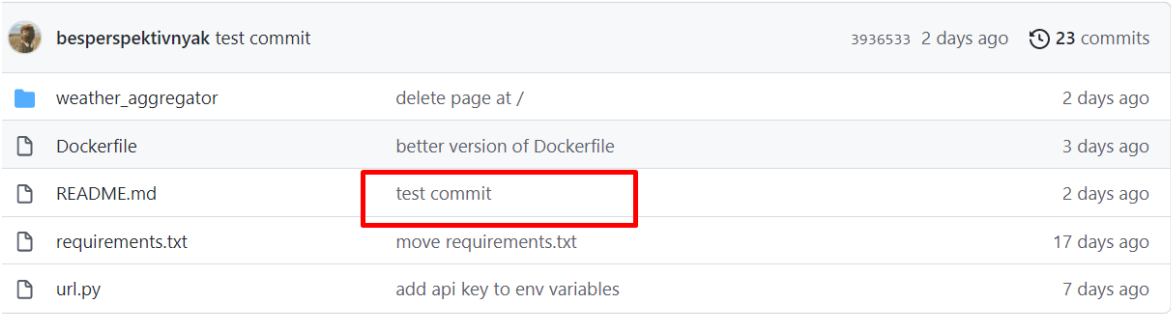
The last step: rebuild docker image and push it on DockerHub.



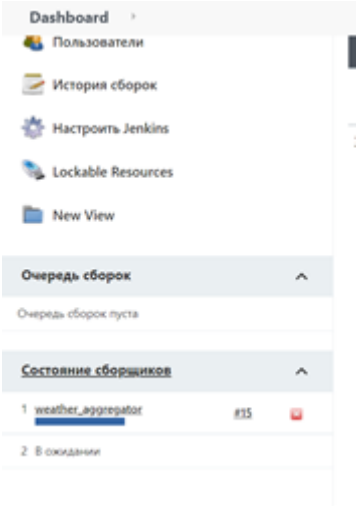
After these steps your Docker image will update after every commit pushed on GotHub.

Example

I've did test commit in repository of my project.

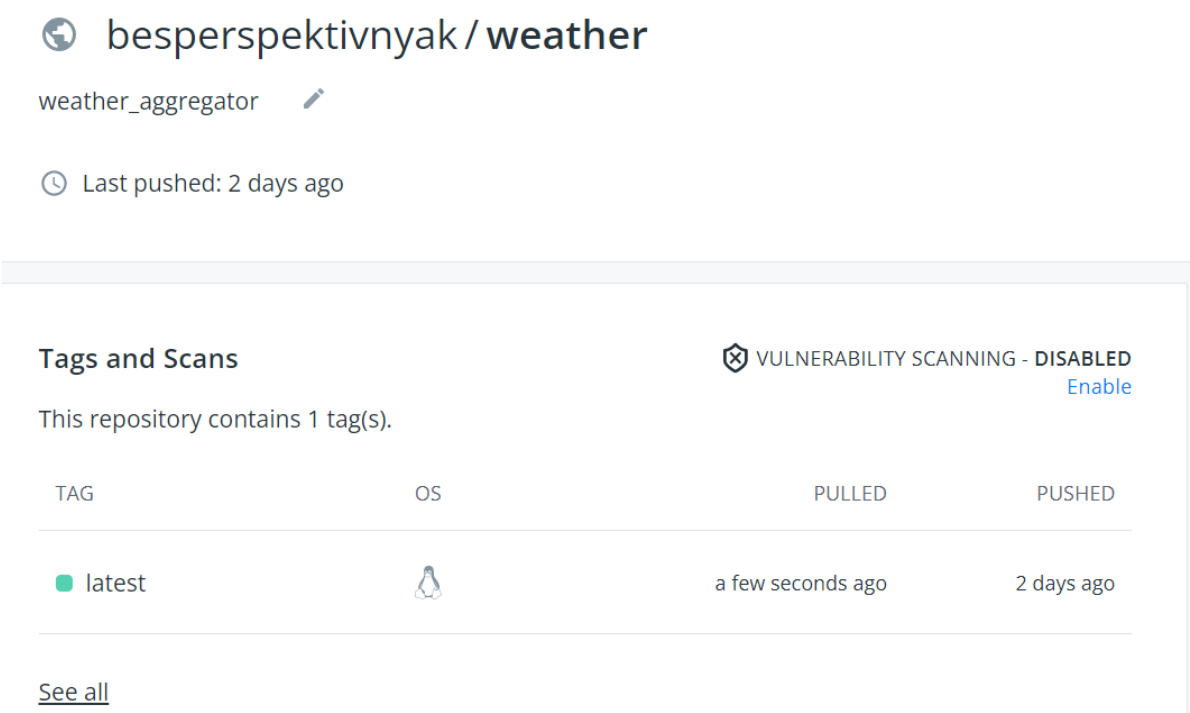


In Jenkins have started build.



Build ended with sucsess (see console output below).

Then check out DockerHub and see new push.



Thats's all!

Ngrok

To get your own host I've used Ngrok.

Firstly, sign up on Ngrok. Then folllow the instruction to connect your account. As final step ypu need to use command with port on which Jenkins is started.

```
ngrok.exe http <your port>
```

You'll see the following picture in your terminal. Copy necessary URL and paste it in GitHub Webhook and as Jenkins URL (see the beginning).

```
Session Status                online
Account                       Elizaveta (Plan: Free)
Version                       2.3.40
Region                        United States (us)
Web Interface                 http://127.0.0.1:4041
Forwarding                    http://d1bc-5-18-180-150.ngrok.io -> http://localhost:8080
Forwarding                    https://d1bc-5-18-180-150.ngrok.io -> http://localhost:8080
```

Jenkins 1 2

Dashboard › weather_aggregator › #15

- Назад к проекту
- Статус
- Изменения
- Вывод консоли
  - Просмотреть как неформатированный текст
- Редактировать информацию сборки
- Delete build '#15'
- Лог опроса
- Git Build Data
- Предыдущая сборка

Вывод на консоль

```
Started by GitHub push by besperspektivnyak
Running as SYSTEM
Building in workspace
C:\WINDOWS\system32\config\systemprofile\AppData\Local\Jenkins\.jenkins\workspace\weather_aggr
egator
The recommended git tool is: NONE
No credentials specified
 > git.exe rev-parse --resolve-git-dir
C:\WINDOWS\system32\config\systemprofile\AppData\Local\Jenkins\.jenkins\workspace\weather_aggr
egator\.git # timeout=10
Fetching changes from the remote Git repository
 > git.exe config remote.origin.url
https://github.com/besperspektivnyak/weather_aggregator.git # timeout=10
Fetching upstream changes from https://github.com/besperspektivnyak/weather_aggregator.git
 > git.exe --version # timeout=10
 > git --version # 'git version 2.25.0.windows.1'
 > git.exe fetch --tags --force --progress --
https://github.com/besperspektivnyak/weather_aggregator.git
+refs/heads/*:refs/remotes/origin/* # timeout=10
```

```
 > git.exe rev-parse "refs/remotes/origin/main^{commit}" # timeout=10
Checking out Revision 39365331427f47d725b98ec65a47b13d27870d21 (refs/remotes/origin/main)
 > git.exe config core.sparsecheckout # timeout=10
```

Dashboard ▸ weather_aggregator ▸ #15

```
Commit message: "test commit"
 > git.exe rev-list --no-walk 8335788008f2415c6471f7601c7c4c5ccf89aae1 # timeout=10
[weather_aggregator] $ cmd /c call C:\WINDOWS\TEMP\jenkins6628549818931049718.bat

C:\WINDOWS\system32\config\systemprofile\AppData\Local\Jenkins\.jenkins\workspace\weather_aggr
egator>docker build -t besperspektivnyak/weather .
#1 [internal] load build definition from Dockerfile
#1 sha256:1cbf3dacd66ff62f52456a28b4c101cbb99153cc64e11fc759b8930d08f9fe70
#1 ...

#2 [internal] load .dockerignore
#2 sha256:c676a816cecf5956ef1a255a2fb8b3cb1a0b336b03c2bc4a538ab41e6017fe58
#2 transferring context: 2B 0.0s done
#2 DONE 0.4s

#1 [internal] load build definition from Dockerfile
#1 sha256:1cbf3dacd66ff62f52456a28b4c101cbb99153cc64e11fc759b8930d08f9fe70
#1 transferring dockerfile: 32B 0.1s done
#1 DONE 0.6s

#3 [internal] load metadata for docker.io/library/python:3.8.0
#3 sha256:0fccb25f9bdaa37f1acc828d268bb0353849363fe7a76d73721e528c9bd3b29c
#3 ...

#4 [auth] library/python:pull token for registry-1.docker.io
#4 sha256:ba5f0b9b44583e04460459d5765aeea1c44fe24897c87abe8323fd6f56245605
#4 DONE 0.0s

#3 [internal] load metadata for docker.io/library/python:3.8.0
#3 sha256:0fccb25f9bdaa37f1acc828d268bb0353849363fe7a76d73721e528c9bd3b29c
#3 DONE 9.5s

#5 [1/6] FROM
docker.io/library/python:3.8.0@sha256:adb48bf76e44cd7d74607db157bba756368af42196aaea945e2114d9
57cb5558
#5 sha256:1f6050661818bb47af045e605c6bb45c15abec6163a58eff602fcea9080a600f
#5 DONE 0.0s

#8 [internal] load build context
#8 sha256:4d34a0a43849ac530bf396aacc18b882813d07812817934fa45915db84691ac3
#8 transferring context: 24B 0.0s
#8 transferring context: 17.76kB 0.2s done
#8 DONE 0.3s

#9 [4/6] COPY requirements.txt .
#9 sha256:fac5ea613244d24e40a2d64b3e91c08d61e6c681c28b02aad7493c575d99ab79
#9 CACHED

#6 [2/6] WORKDIR /app
#6 sha256:e43c7544a5aa53cbb2ccdc3a9b7b33fa5a782a6aaaee6ccd6c2dff7e95f871f3
```

```
#6 CACHED

#7 [3/6] RUN apt-get update -y && apt-get install -y python3-pip
```

Dashboard › weather_aggregator › #15

```
#10 [5/6] RUN pip install --no-cache-dir -r requirements.txt
#10 sha256:65f149c36ab69a3e82219ee72096cfde47b67bc991a20ff7df7de101ed51241d
#10 CACHED

#11 [6/6] COPY . .
#11 sha256:9979c99fea1dd953b4c80758f1c440ae6327b8cb6a4be9855786918e00ec1827
#11 DONE 0.4s

#12 exporting to image
#12 sha256:e8c613e07b0b7ff33893b694f7759a10d42e180f2b4dc349fb57dc6b71dcab00
#12 exporting layers
#12 exporting layers 0.3s done
#12 writing image sha256:1e103b26e536f59ec97ed0982e97a0d45ac9597f59ac99894ef4ddd3c3fecfcb 0.0s
done
#12 naming to docker.io/besperspektivnyak/weather 0.0s done
#12 DONE 0.5s

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to
fix them

C:\WINDOWS\system32\config\systemprofile\AppData\Local\Jenkins\.jenkins\workspace\weather_aggr
egator>docker login -u besperspektivnyak -p dom3490041
WARNING! Using --password via the CLI is insecure. Use --password-stdin.
Login Succeeded

C:\WINDOWS\system32\config\systemprofile\AppData\Local\Jenkins\.jenkins\workspace\weather_aggr
egator>docker image push besperspektivnyak/weather
Using default tag: latest
The push refers to repository [docker.io/besperspektivnyak/weather]
0780c5fdef3a: Preparing
9c71521b23ae: Preparing
db20e20e57ba: Preparing
635010e08df0: Preparing
b5e8827c38c0: Preparing
00947a3aa859: Preparing
7290ddeeb6e8: Preparing
d3bfe2faf397: Preparing
cecea5b3282e: Preparing
9437609235f0: Preparing
bee1c15bf7e8: Preparing
00947a3aa859: Waiting
7290ddeeb6e8: Waiting
d3bfe2faf397: Waiting
cecea5b3282e: Waiting
9437609235f0: Waiting
bee1c15bf7e8: Waiting
423d63eb4a27: Preparing
7f9bf938b053: Preparing
f2b4f0674ba3: Preparing
```

```
423d63eb4a27: Waiting
7f9bf938b053: Waiting
f2b4f0674ba3: Waiting
```



```
db20e20e57ba: Layer already exists
635010e08df0: Layer already exists
00947a3aa859: Layer already exists
d3bfe2faf397: Layer already exists
cecea5b3282e: Layer already exists
7290ddeeb6e8: Layer already exists
423d63eb4a27: Layer already exists
bee1c15bf7e8: Layer already exists
9437609235f0: Layer already exists
7f9bf938b053: Layer already exists
0780c5fdef3a: Pushed
f2b4f0674ba3: Layer already exists
latest: digest: sha256:d51f6733a574d0ce22808eaa3176fc874c34f661af778c8c537c1516f694934c size:
3264

C:\WINDOWS\system32\config\systemprofile\AppData\Local\Jenkins\.jenkins\workspace\weather_aggr
egator>exit 0
Finished: SUCCESS
```