

Start and Stop the System

Step 1 – Go to the project folder

Open a terminal and go to the folder where the application is located:

Run:

```
cd /path/to/project
```

```
/home/Sorin/Pricing  
$
```

Run:

```
docker compose down
```

```
$ docker compose down  
[+] Running 8/8  
✔ Container pricing-traefik-1      Removed      2.7s  
✔ Container pricing-orchestrator-1 Removed      10.3s  
✔ Container pricing-scheduler-1   Removed      10.2s  
✔ Container pricing-api-1         Removed      0.3s  
✔ Container pricing-metabase-1    Removed      2.8s  
✔ Container pricing-postgres-1    Removed      0.2s  
✔ Container pricing-metabase-postgres-1 Removed      0.2s  
✔ Network pricing-traefik-net     Removed      0.2s
```

This will stop and remove the containers and network.

Step 2 – Start all services

Run:

```
docker compose up -d
```

```
$ docker compose up -d  
[+] Running 8/8  
✔ Network pricing_traefik-net      Created      0.1s  
✔ Container pricing-traefik-1      Started      1.5s  
✔ Container pricing-metabase-postgres-1 Started      1.4s  
✔ Container pricing-orchestrator-1 Started      2.0s  
✔ Container pricing-postgres-1     Started      1.8s  
✔ Container pricing-scheduler-1    Started      2.2s  
✔ Container pricing-api-1          Started      2.6s  
✔ Container pricing-metabase-1     Started      2.3s
```

This will create and start all containers in the background.

These are the basic commands to start and stop the system. Always make sure you are inside the correct project folder before running them.

Check Running Containers

Step 1 – List all containers

Run the command:

```
docker ps
```

```
$ docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS
fdd61440c870	pricing-scheduler	"/entrypoint.sh"	30 minutes ago	Up 30 minutes	
pricing-scheduler-1					
939189c05c87	pricing-api	"python3 app.py"	28 hours ago	Up 28 hours	3101/tcp
pricing-api-1					
76611556a3b1	metabase/metabase:latest	"/app/run_metabase.sh"	28 hours ago	Up 28 hours	3000/tcp
pricing-metabase-1					
ce6c338b76b0	pricing-orchestrator	"sleep infinity"	28 hours ago	Up 28 hours	
pricing-orchestrator-1					
81f75bc5db3a	traefik:v3.0	"/entrypoint.sh --pr..."	28 hours ago	Up 28 hours	0.0.0.0:80->80/tcp, :::80->80/tcp
pricing-traefik-1					
4bb833441d63	postgres:15	"docker-entrypoint.s..."	28 hours ago	Up 28 hours	5432/tcp
pricing-postgres-1					
c41638580799	postgres:15	"docker-entrypoint.s..."	28 hours ago	Up 28 hours	5432/tcp
pricing-metabase-postgres-1					

You will see a table with information about each container:

CONTAINER ID – unique identifier of the container

IMAGE – the Docker image used

STATUS – should show *Up* if the container is running

PORTS – which ports are exposed

NAMES – the name of the container (example: pricing-api-1)

View Logs for Containers

Run:

```
docker logs pricing-api-1
docker logs pricing-scheduler-1
docker logs pricing-metabase-1
docker logs pricing-orchestrator-1
docker logs pricing-traefik-1
docker logs pricing-postgres-1
docker logs pricing-metabase-postgres-1
```

```
$ docker logs pricing-scheduler-1
[scheduler] rulează cu schedule: 0 2 */1 * *
crond: crond (busybox 1.37.0) started, log level 8
$
```

Use logs to check if containers are working correctly or to troubleshoot errors.

Note

This command **does not affect the system**.

It only displays the logs generated by the container.

You can use it for any container: pricing-api-1, pricing-scheduler-1, pricing-metabase-1, etc.

Check and Modify the Scheduler

Step 1 – Verify current schedule

Run:

```
docker logs pricing-scheduler-1
```

```
$ docker logs pricing-scheduler-1
[scheduler] rulează cu schedule: 0 2 */1 * *
crond: crond (busybox 1.37.0) started, log level 8
$
```

Understand the Scheduler Expression

Example from the logs:

[scheduler] running with schedule: 0 2 */1 * *

This expression is a **cron schedule** with 5 fields:

```
minute (0 - 59)
|
| hour (0 - 23)
| |
| | day of month (1 - 31)
| | |
| | | month (1 - 12)
| | | |
| | | | day of week (0 - 6) (Sunday=0)
| | | |
0 2 */1 * *
```

Explanation:

0 → minute = at minute 0

2 → hour = at 02:00 in the morning

***/1** → every 1 day (which means daily)

******* → every month

******* → every day of the week

Together: **The scheduler runs every day at 02:00 AM.**

Env -file

```
# -----
# SCRAPER_SCHEDULE=7 <-- every 7 days
# SCRAPER_SCHEDULE=10 <-- every 10 days
SCRAPER_SCHEDULE=1
#
```

Important Note

Always check the .env file first to confirm the schedule.

In our case, SCRAPER_SCHEDULE=1 → the program is correctly set to run **once per day**.

Change the Scheduler Interval

Step 1 – Open the .env file

In the project folder, open the .env file with a text editor (for example nano or vim):

```
nano .env
```

```
# Orchestrator / Scheduler
# -----
# SCRAPER_SCHEDULE=7  <-- every 7 days
# SCRAPER_SCHEDULE=10 <-- every 10 days
SCRAPER_SCHEDULE=1
# -----
```

1.Find the line for schedule

2.Change 1 → run every 1 day ,7 → run every 7 days ,30 → run every 30 days etc

```
# SCRAPER_SCHEDULE=7  <-- every 7 days
# SCRAPER_SCHEDULE=10 <-- every 10 days
SCRAPER_SCHEDULE=13
```

Save and exit in nano: Press CTRL + X

```
# -----
DOMAIN=preismatrix.dare-gmbh.de
Save modified buffer?
Y Yes
N No      ^C Cancel
```

Confirm with Y Press ENTER

Rebuild and restart scheduler:

```
docker compose build scheduler
```

```
$ docker compose build scheduler
[+] Building 0.9s (11/11) FINISHED
=> [scheduler internal] load build definition from Dockerfi
=> => transferring dockerfile: 333B
=> [scheduler internal] load metadata for docker.io/library
=> [scheduler internal] load .dockerignore
```

```
docker compose up -d scheduler
```

```
$ docker compose up -d scheduler
[+] Running 1/1
✔ Container pricing-scheduler-1 Started
$
```

Verify the New Schedule

Run:

```
docker logs pricing-scheduler-1
```

```
$ docker logs pricing-scheduler-1
[scheduler] rulează cu schedule: 0 2 */13 * *
crond: crond (busybox 1.37.0) started, log level 8
$
```

This shows the program is now scheduled to run **every 13 days at 02:00 AM**.

The modification was applied correctly.

Summary

1. Go to the project folder & Open the .env file & Change the value (number of days) & Save and exit the file
2. Rebuild the scheduler run `docker compose build scheduler`
3. Start the scheduler run `docker compose up -d scheduler`
4. Check the scheduler logs run `docker logs pricing-scheduler-1`

Change Traefik Password – Steps

Go to the project folder

Generate a new password hash:

```
htpasswd -nbB user newpassword
```

Replace <user> with any username you want

Replace <newpassword> with your new password

example : `admin MyPassword4445##$#@#$`

```
htpasswd -nbB admin MyPassword4445##$#@#$
```

```
$ htpasswd -nbB admin MyPassword4445##$#@#$
admin:$2y$05$.XMRA4Ko0qJBi8nvrxrDneQXAkMgIlq2m0iu2N0qs3SMvc0s7kC9S
```

Open the Traefik configuration file (`traefik_dynamic.yml`)

```
$ cd traefik
$ pwd
/home/Sorin/Pricing/traefik
$
```

Replace the old hash with the new one

```
GNU nano 6.2 traefik.yml
http:
  middlewares:
    api-auth:
      basicAuth:
        users:
          - "admin:$apr1$x856PDmm$2urvGvU1aKjkBbJYqCgH2."
```

New password change it to new generate one:

```
http:
  middlewares:
    api-auth:
      basicAuth:
        users:
          - "admin:$2y$05$.XMRA4Ko0qJBi8nvrxrDneQXAkMgIlq2m0iu2N0qs3SMvc0s7kC9S"
```

Save and exit the file

Restart Traefik:

```
docker compose restart traefik
```

Test login with the new password

⚠ Note

If the new password does **not** work after restart, then rebuild the service:

```
docker compose build traefik
docker compose up -d traefik
```

After that, test the login again.

Run the Orchestrator Manually – Important Note

The extractor has been tested and runs automatically according to the schedule defined in the .env file (variable SCRAPER_SCHEDULE).

However, in some cases (e.g. after configuration changes or debugging), it is useful to start the extractor manually to verify its behavior.

Data consistency behavior:

The extractor is designed to store only one set of prices per day in the database.

If it is executed multiple times in the same day:

Identical data will be skipped (not duplicated).

If there are updates, existing entries will be updated accordingly.

Recommended practice:

Once the extractor is started (manually or by the scheduler), allow it to complete the entire cycle.

During this cycle the orchestrator will:

Clean temporary log files from previous runs.

Extract and process the new price files.

Format products into type → category → subcategory.

Write data into the database (or update if needed).

Archive the result files and automatically delete archives older than 7 days.



For transparency and debugging, the orchestrator can be started manually with:

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Run:

```
docker compose run --rm orchestrator python runner.py
```

Starting orchestrator... scraper: cdz

```
$ docker compose run --rm orchestrator python runner.py

Now Running: lcdz-scraper.py
[SAVED] Product: Bauschutt / Boden siebfähig | Size: 3 | Price: 321,30 € | Title: Bauschutt / Boden siebfähig 3m³
[SAVED] Product: Bauschutt / Boden siebfähig | Size: 5 | Price: 392,00 € | Title: Bauschutt / Boden siebfähig 5m³
[SAVED] Product: Bauschutt | Size: 6 | Price: 471,00 € | Title: Bauschutt 6m³
[SAVED] Product: Bauschutt | Size: 7 | Price: 549,00 € | Title: Bauschutt 7m³
[SAVED] Product: Bauschutt | Size: 12 | Price: 942,00 € | Title: Bauschutt 12m³
[SAVED] Product: Baumischabfall | Size: 3 | Price: 446,25 € | Title: Baumischabfall 3 m³
```

Running scraper: dino

```
Full scraping. File saved in: results_cdz-berlin/cdz_container_prices_20251014_021545.csv
Successful completion: lcdz-scraper.py

Now Running: 2dino-scraper.py
☑ 3 m³ | Sperrmüll | 381,17 €
☑ 3 m³ | Bauschutt | 370,16 €
☑ 7 m³ | Baumischabfall | 871,52 €
☑ 7 m³ | Beton | 322,59 €
```

Running scraper: Klebs

```
Now Running: 3klebs-scraper.py
☑ Accepted cookies
🔗 Waste card links: 11
📦 7 containers found in: https://www.klebs.info/abfaelle/altholz/
[📄] ['unsere 5,5 cbm (kubikmeter), 7 cbm und 10 cbm absetzcontainer halten wir
artcontainer (din-container) gibt es wahlweise mit deckel und klappe, oder in o
ps://www.klebs.info/containerdienst/absetzcontainer/']
```

Running scraper: clearago

```
Now Running: 4main_clearago.py
[🚀] Starting Clearago Scraper (debug mode: False)
[1] Opening site and submitting postcode...
[➡] Navigating to https://www.clearago.de/
[✓] Page loaded
[✓] Cookiebot 'Allow all' clicked
```

Running scraper: entsorgo

```
[📄] Finished Clearago scraping and CSV export.
Successful completion: 4main_clearago.py

Now Running: 5main_entsorgo.py
🚀 I start the entsorgho scraper...

📦 Container: Baustellenmischabfall ohne Boden, Bauschutt & Steine
☑ Baustellenmischabfall ohne Boden, Bauschutt & Steine Container | 3 | 399,76 €
☑ Baustellenmischabfall ohne Boden, Bauschutt & Steine Container | 5 | 550,73 €
☑ Baustellenmischabfall ohne Boden, Bauschutt & Steine Container | 7 | 771,02 €
```

Scrapers Finished

You will see **Final JSON saved** and **Final CSV saved**.

```
☑ Final JSON saved: output_data.json
Done: json_maker.py

Finalizing: cvs_maker.py
☑ Final CSV saved: output_data.csv
☑ Final CSV saved: output_data.csv
[DELETED] Folder deleted: results_cdz-berlin
[DELETED] Folder deleted: results_clearago
[DELETED] Folder deleted: results_dino_container
[DELETED] Folder deleted: results_ensorgo
[DELETED] Folder deleted: results_klebs
[MOVED] output_data.csv → /app/results_data_14_10_2025/output_data.csv
[MOVED] output_data.json → /app/results_data_14_10_2025/output_data.json
Done: cvs_maker.py
```

Category Parsing

Messages like Running category parser: create_type.py.

```
Running category parser: create_type.py
Category script completed: create_type.py

Running category parser: create_category.py
Category script completed: create_category.py
```

Data is categorized into type / category / subcategory.

Database Import

⚠ **Note for Client:**

At the end of every successful run, the log should show:

Database populated successfully.

Cleaner finished successfully.

```
Importing data into PostgreSQL...
☑ Found 1 CSV file(s).
☑ Total rows before filtering: 375
☑ Connected to PostgreSQL.
☑ Table, column scraped_date, and unique index ensured.
☑ Deleted existing data for date: 2025-10-14
☑ Data inserted successfully (duplicates skipped by constraint).
Database populated successfully.
```

```
Running cleaner script...
[MOVED] results_data_14_10_2025 → /app/archive/results_data_14_10_2025
Cleaner finished successfully.
```

At the **end of every successful run**, the log should show:

Database populated successfully.

Cleaner finished successfully.

Reset Databases and Containers

Sometimes you may want to restart the system **from zero**.

Be careful: this will erase existing data.

1. Stop All Containers

```
docker compose down
```

2. Remove All Data Volumes (⚠ deletes everything: both PostgreSQL and Metabase databases)

```
docker compose down -v
```

This will remove:

pricing_pgdata → Scraper database (extracted prices)

pricing_metabase_pgdata → Metabase internal database (dashboards, users, configs)

Warning: All data will be lost. Only use this if you want a clean system.

Remove Only One Database

If you only want to reset **one database**, you can remove only its volume.

Remove Scraper Database (keep Metabase intact)

```
docker volume rm pricing_pgdata
```

Remove Metabase Database (keep Scraper data intact)

```
docker volume rm pricing_metabase_pgdata
```

After removing, recreate the containers:

```
docker compose up -d
```

Notes

Removing a volume = permanent data loss.

If you only need to restart services **without deleting data**, use:

Removing a volume = permanent data loss.

The database will be rebuilt empty (fresh state).

After removing volumes, the databases will be recreated from scratch using the values in your `.env` file (DB name, user, password, port).

Important: Do not change `.env` database credentials while the system is running.

The scrapers and API read the connection details from `.env`.

If the credentials in `.env` don't match the running PostgreSQL instance, the system will fail to insert data.

Further Commands

This guide covers only the **most relevant commands** for running and maintaining the Pricing Data Platform.

For more advanced Docker commands and options, please refer to the official Docker documentation:

<https://docs.docker.com/reference/cli/docker/>