

AWX CleanUp Job but Postgres Database still grows

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Author: Dominik Wombacher
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I encountered a interesting situation at work today, the disk were the persistent data of our [Ansible AWX](#) instance are located was running out of space. The Postgres Database, or to be very specific the Table **main_jobevent** was around 16GB in size and still growing.

Some time ago the CleanUp Jobs were activated / scheduled, so it looks like that data prior that time was skipped and not removed. Also I had to learn that even in case some data will be deleted, Postgres will not automatically free-up previously allocated storage.

Job Event removal

First I removed old job events, which were skipped by the AWX Cleanup Schedule, via *awx-manage* within the Docker Container *awx_task*:

```
docker exec -it awx_task /bin/bash
awx-manage shell_plus
```

The range value need to be adjusted based on your needs, in my Case I wanted to remove the job event 1 till 2949:

```
from awx.main.models import Job
for record_id in range(1, 2949):
    try:
        db_object = Job.objects.get(id=record_id)
        db_object.delete()
    except:
        pass
```

Source: <https://tobschall.de/2019/05/07/ansible-tower-cleanup/> (Archive: [1], [2])

Postgres Cleanup

So even though it was a little *"forcible"* approach, it worked quite well in my case, but that shouldn't be the Standard Solution on a day-to-day basis. Actually I expect that something similar will not be necessary in future due to enabling of **auto-vacuum** and adjusted **AWX Cleanup Schedules**.

```
docker exec -it awx_postgres /bin/bash
psql -U awx

\c awx
```

As you can see, **VACUUM FULL** (handle with care!) was able to free up approx. 11GB space:

```
SELECT pg_size_pretty( pg_total_relation_size('public.main_jobevent') );

# pg_size_pretty
#-----
# 16 GB
# (1 row)

VACUUM FULL public.main_jobevent;
SELECT pg_size_pretty( pg_total_relation_size('public.main_jobevent') );

# pg_size_pretty
#-----
# 4915 MB
# (1 row)
```

auto-vacuum enabling

It seems like that in the config delivered with the AWX Docker Container, the **auto-vacuum** feature is disabled in Postgres. Can be quickly enabled with two minor adjustments in **postgresql.conf**:

```
track_counts = on
autovacuum = on
```

For the change to take effect, the Postgres Database need to be restarted. You can for sure also just stop and start the AWX Stack via *docker-compose*, whatever you prefer.

AWX Job Schedules

Last but not least, I adjusted to AWX CleanUp Jobs to run Daily with a Retention of 14 days, that's sufficient in our Environment and should help to avoid similar issues.