

#### Practice: Backfill your DAG without the CLI

#### Introduction

- If you don't have access to the CLI, there is no direct backfill method.
- However it is possible by triggering a backfill\_trigger\_dag via the API and using dag\_run.conf to pass in parameters such as start\_date, end\_date, and dag\_id for the required backfill.
- the backfill\_trigger\_dag will then trigger the backfill for the desired target DAG
- ensure the backfill\_trigger\_dag is unpaused, with a schedule of None so that it can be triggered as needed but does not run on an interval

## Prerequisites

Airflow CLI installed

### Instructions

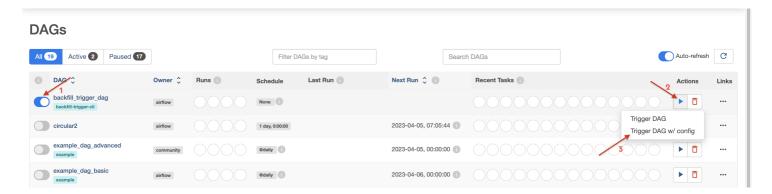
- → In the below example, we will use two DAGs:
- 1. The backfill\_trigger\_dag this DAG uses a BashOperator to run the Airflow CLI command airflow dags backfill and pulls in the dag\_run.conf values that we pass while manually triggering on the UI i.e start\_date , end\_date , dag\_id , etc.
- 2. The example\_dag\_basic this is the DAG the backfill is being performed on (i.e. the target DAG). You can backfill any DAG of your choice.
- → The DAG responsible for triggering the backfill:

backfill\_trigger\_dag :

💡 **Note:** We will use Jinja templates to pull in the <code>dag\_run.conf</code> values from the API call:

#### → The execution will be as follows

1. First we shall manually trigger the backfill\_trigger\_dag with a configuration json.



2. Now we shall pass the necessary parameters for performing the backfill including

```
→ dag_id

→ date_start

→ date_end

i.e {"dag_id": "example_dag_basic", "date_start": 20230401, "date_end": 20230405}
```

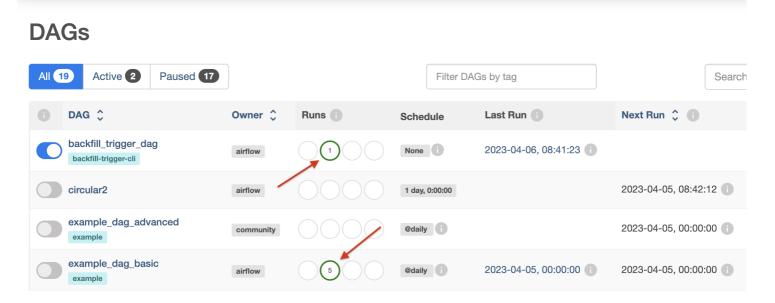
## Trigger DAG: backfill\_trigger\_dag

# Logical date 2023-04-06T07:28:01+0 Run id (Optional) Run ID Configuration JSON (Optional, must be a dict object) 1 [{"dag id": "example dag basic", "date start": 20230401, "date end": 20230405} 1 To access configuration in your DAG use {{ dag\_run.conf }} . As core.dag\_run\_conf\_overrides\_params is set to True, Unpause DAG when triggered

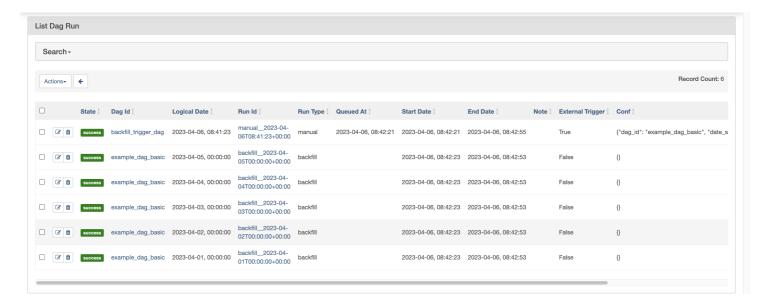
3. And we get the 5 backfills successfully

Cancel

Trigger



4. We can verify the same from the Browse → DAG Runs tab as well



Great! Now we can backfill a DAG even if we don't have access to the Airflow CLI.

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