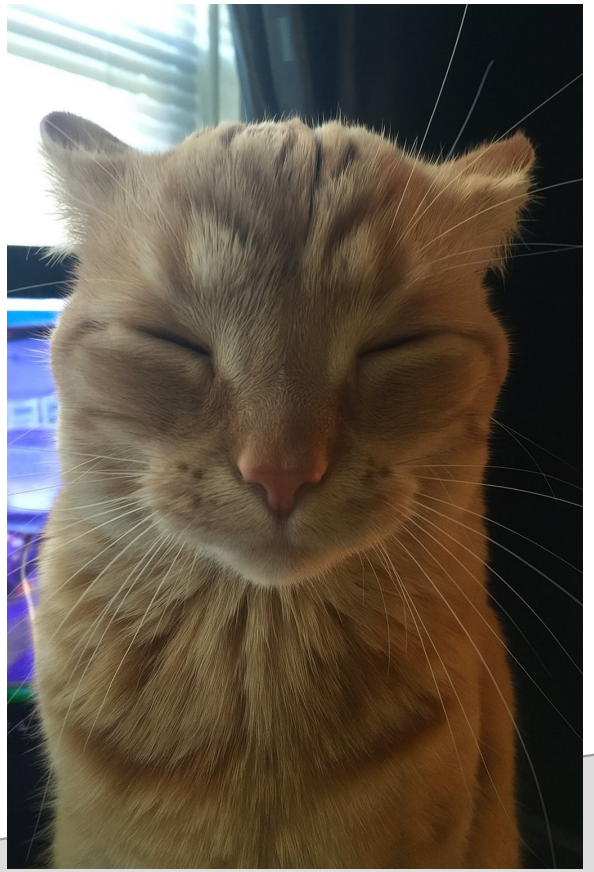
Apache
Airflow

whoami

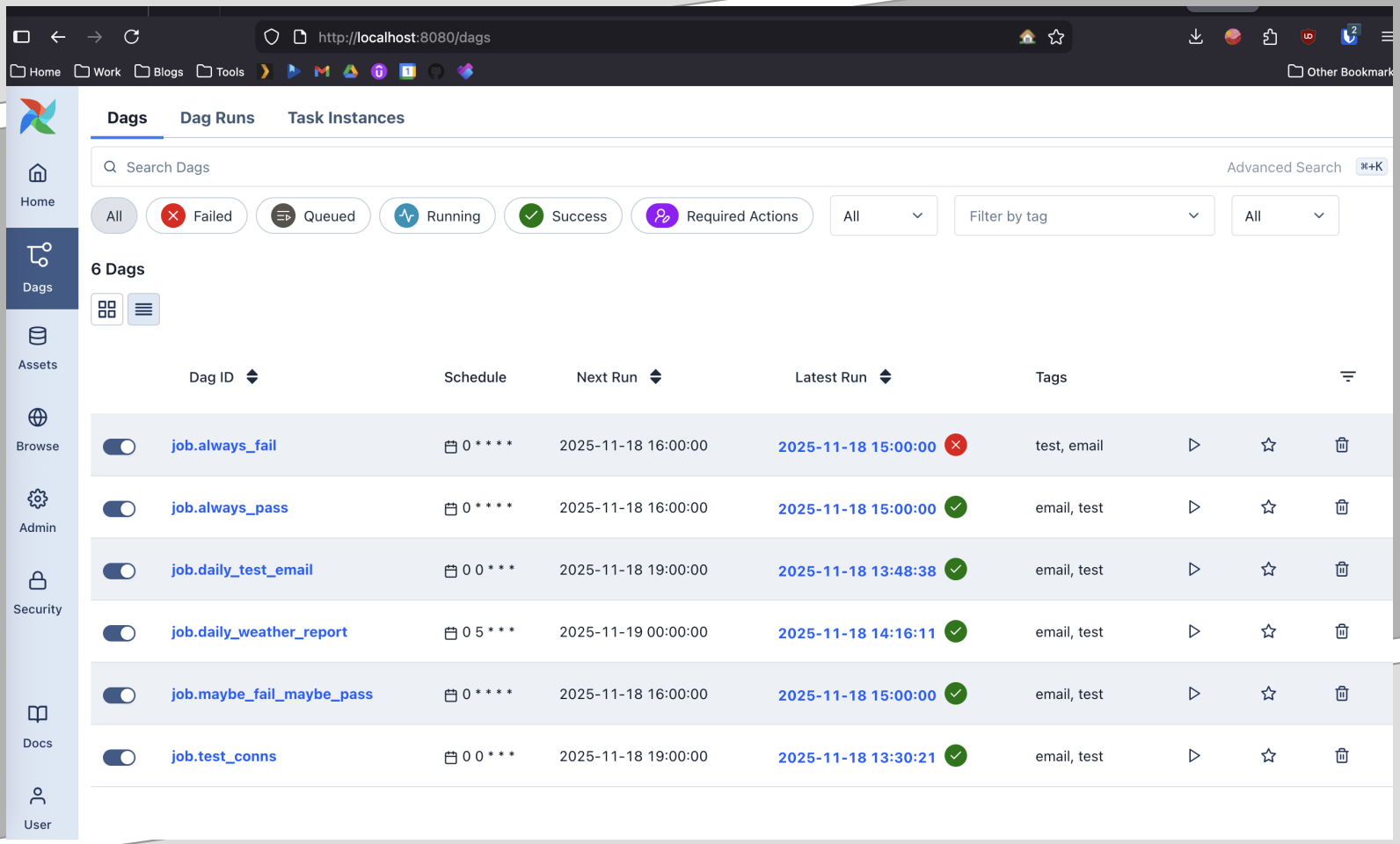
- Joshua
- Student @ WMU
- Systems Analyst / Developer @ a college
- If u want to know more, have a qr code



air who?

- Maintained by Open Source Contributors and the Apache Software Foundation
- For my big data friends you may recognize apache Hadoop, Cassandra and CouchDB.
- The honorable, but not database software, Gaucamole RMS

air what?


http://localhost:8080/dags
Home
Work
Blogs
Tools
Other Bookmark
Dags
Dag Runs
Task Instances
Search Dags
Advanced Search
⌘+K
All
Failed
Queued
Running
Success
Required Actions
All
Filter by tag
All
6 Dags
Dag ID
Schedule
Next Run
Latest Run
Tags
job.always_fail
0 * * * *
2025-11-18 16:00:00
2025-11-18 15:00:00
test, email
job.always_pass
0 * * * *
2025-11-18 16:00:00
2025-11-18 15:00:00
email, test
job.daily_test_email
0 0 * * *
2025-11-18 19:00:00
2025-11-18 13:48:38
email, test
job.daily_weather_report
0 5 * * *
2025-11-19 00:00:00
2025-11-18 14:16:11
email, test
job.maybe_fail_maybe_pass
0 * * * *
2025-11-18 16:00:00
2025-11-18 15:00:00
email, test
job.test_conns
0 0 * * *
2025-11-18 19:00:00
2025-11-18 13:30:21
email, test
Home
Dags
Assets
Browse
Admin
Security
Docs
User

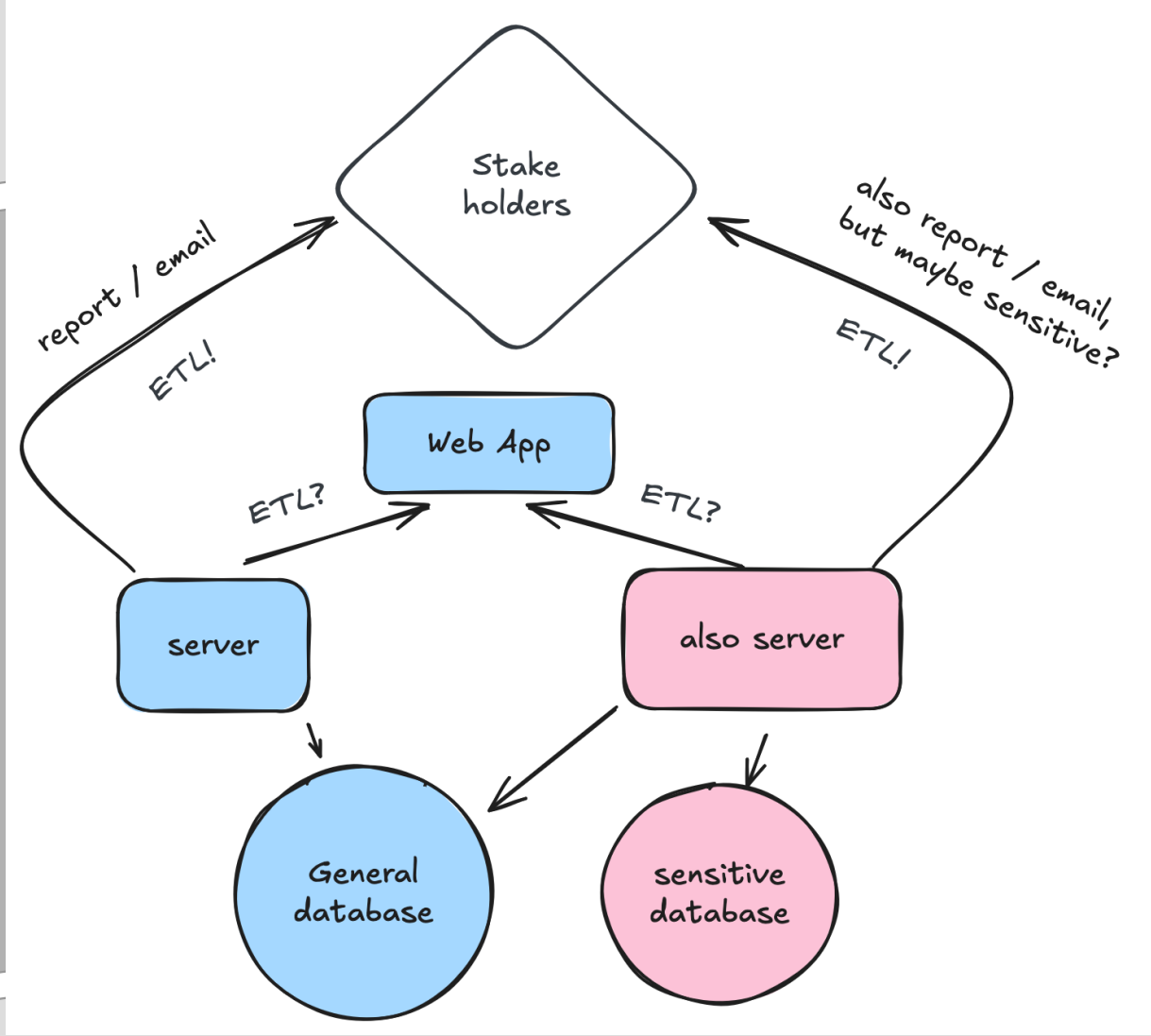
air why?

a world without airflow

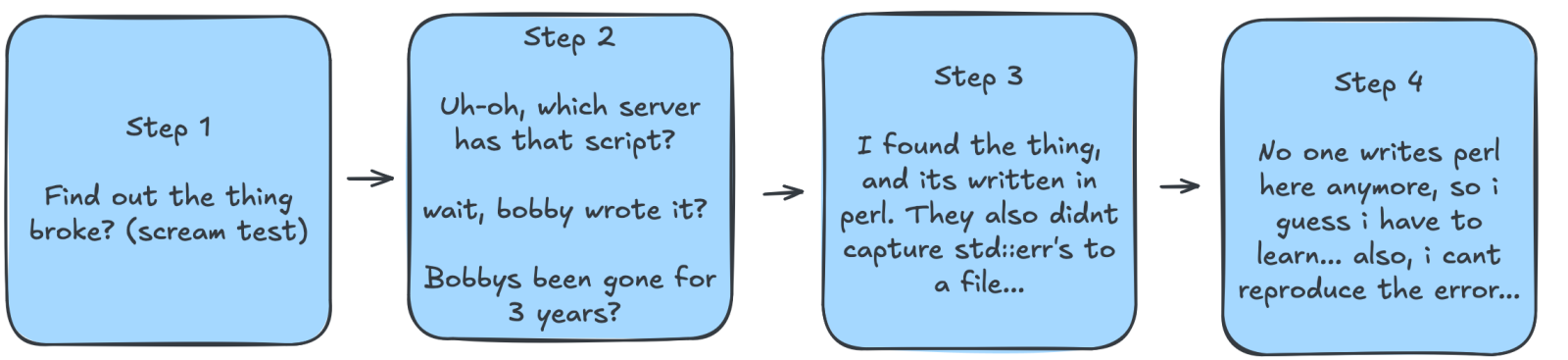
air why?

Two servers is pretty simple, but what are some reasons you may add a server into this mix? (hint: something to do with the programming language you use)

how many linux servers can you guess a medium to large size company has? (for all of my services, I have roughly 8… these are all just for me!!)



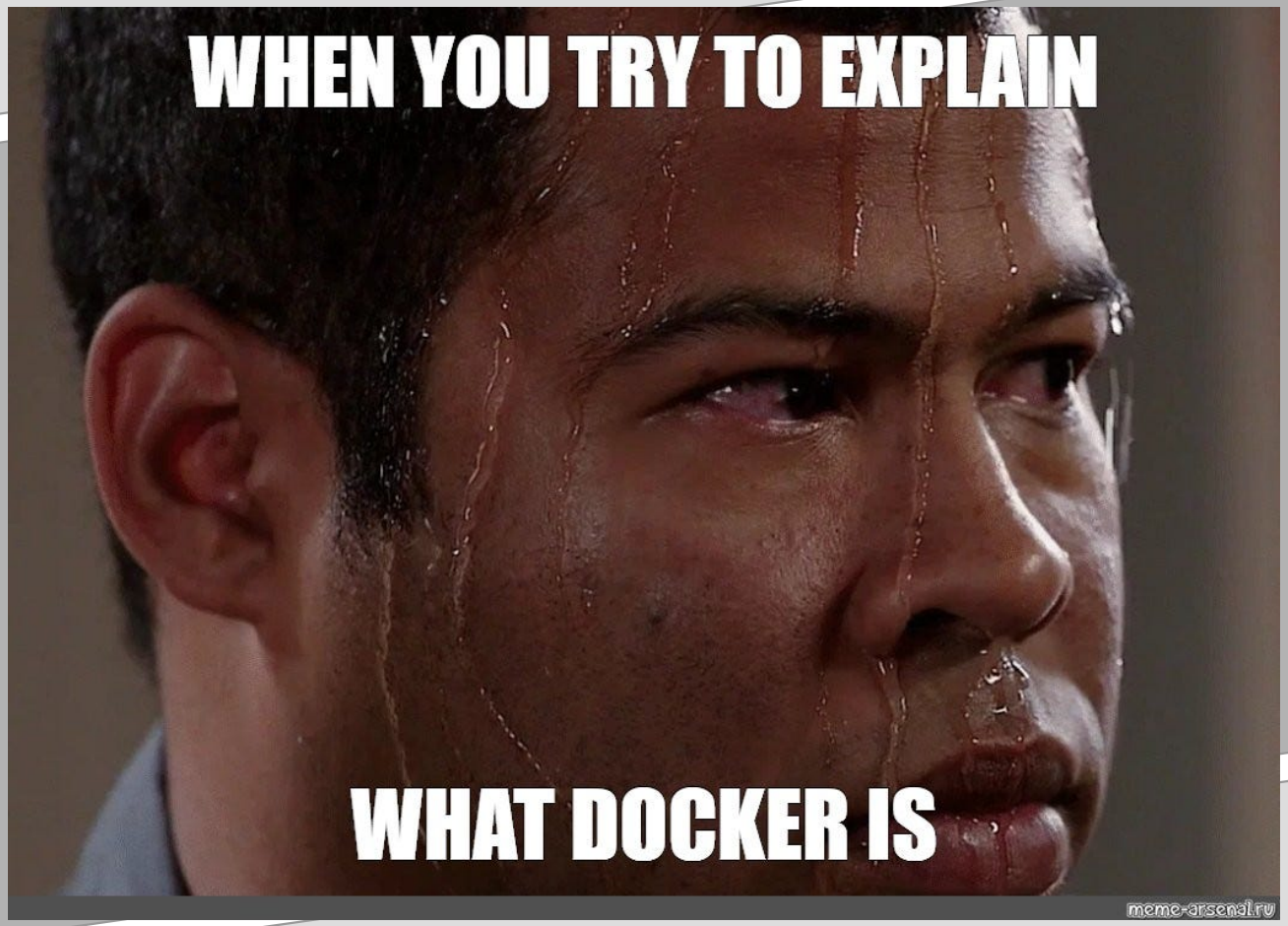
air why?




```
worker1: ~ cronitor list

► Reading user "ubuntu" crontab
+-------------------+-------------------------------------------------------------------------------------------------------------+
| SCHEDULE          | COMMAND                                                                                                     |
+-------------------+-------------------------------------------------------------------------------------------------------------+
| 0 1 * * *         | /var/app/edi/send_batch_invoices.py                                                                         |
| 0 2 * * *         | /var/app/edi/send_batch_settlement.py                                                                       |
| */20 * * * *      | /var/app/edi/reconciler.sh --full                                                                           |
| * * * * *         | /var/app/reporting/rollup minute                                                                            |
| 0 * * * *         | /var/app/reporting/rollup hour                                                                              |
| 0 0 * * *         | /var/app/reporting/rollup day                                                                               |
| 5 0 * * *         | /var/app/reporting/rollup archive-ancient-data                                                              |
+-------------------+-------------------------------------------------------------------------------------------------------------+

► Reading /etc/crontab
+-------------------+-------------------------------------------------------------------------------------------------------------+
| SCHEDULE          | COMMAND                                                                                                     |
+-------------------+-------------------------------------------------------------------------------------------------------------+
| 0 * * * *         | /tmp/foo.sh --systemcrontab                                                                                 |
+-------------------+-------------------------------------------------------------------------------------------------------------+

worker1: ~
```

air how

air how



If I havent actually shown you the configuration and dashboard by now, I should do that now… :)

[redacted]@unorthodoxdev.net

2:16 PM (1 hour ago)

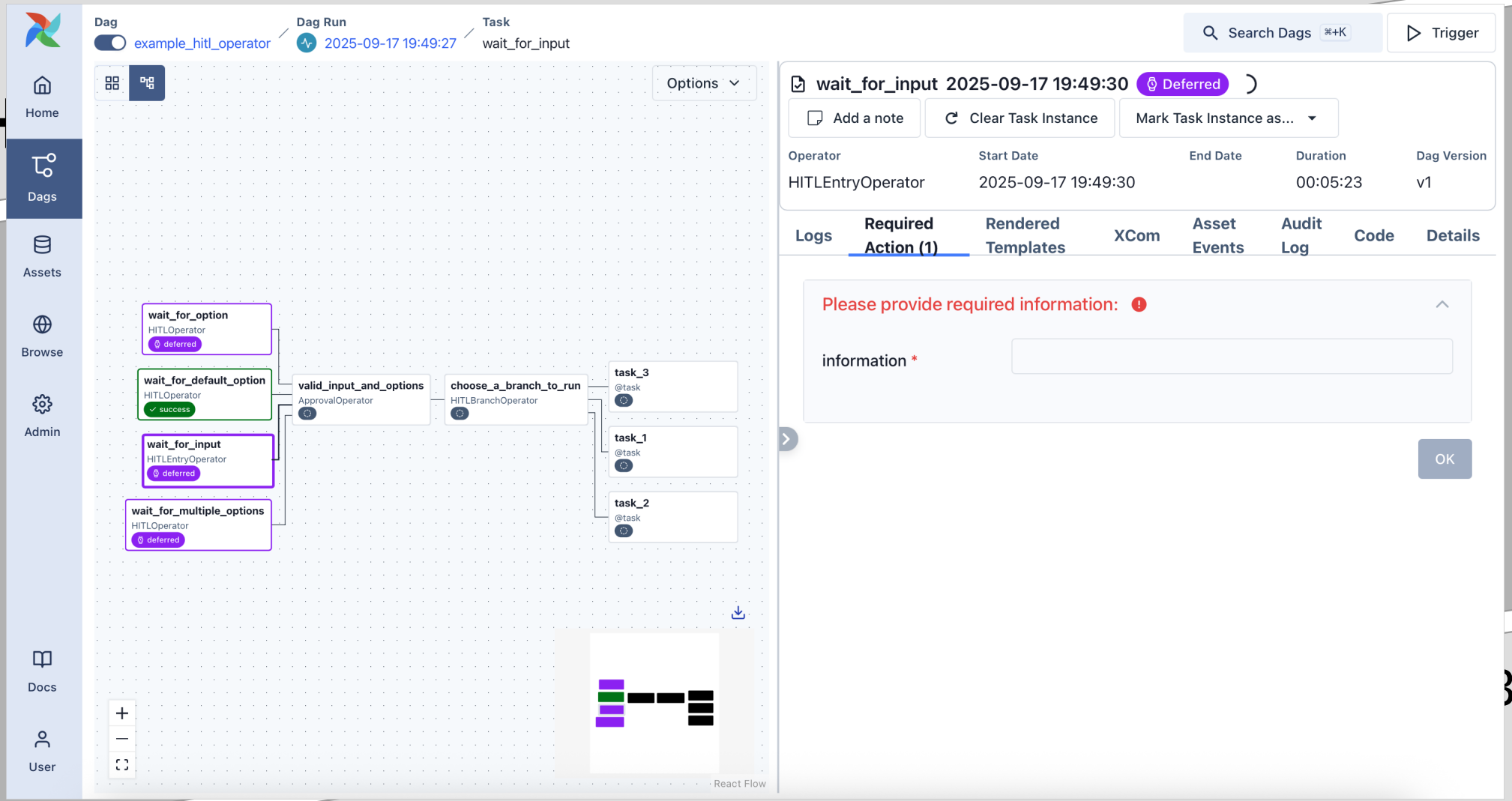
to me, [redacted]

Good Morning!

Todays weather report is as follows:

Tempature: 36 F
Short Forcast: Chance Rain Showers
Detailed Forecast: A chance of rain showers. Cloudy, with a high near 36. East wind around 8 mph. Chance of precipitation is 50%. New rainfall amounts less than a tenth of an inch possible.

Have a great day!


Dag
example_hitl_operator
Dag Run
2025-09-17 19:49:27
Task
wait_for_input
Search Dags ⌘+K
Trigger
Home
Dags
Assets
Browse
Admin
Docs
User
Options
wait_for_option
HITLOperator
deferred
wait_for_default_option
HITLOperator
success
wait_for_input
HITLEntryOperator
deferred
wait_for_multiple_options
HITLOperator
deferred
valid_input_and_options
ApprovalOperator
choose_a_branch_to_run
HITLBranchOperator
task_3
@task
task_1
@task
task_2
@task
React Flow
wait_for_input 2025-09-17 19:49:30
Deferred
Add a note
Clear Task Instance
Mark Task Instance as...
Operator
HITLEntryOperator
Start Date
2025-09-17 19:49:30
End Date
Duration
00:05:23
Dag Version
v1
Logs
Required Action (1)
Rendered Templates
XCom
Asset Events
Audit Log
Code
Details
Please provide required information:
information *
OK

Dag tutorial / Dag Run All Runs / Task print_date

Search Dags ⌘+K | Trigger

Home | Dags | Assets | Browse | Admin | Docs | User

Options | Documentation

Trigger Rule: all_success

print_date
sleep
templated

-09-18 19:34:21

Task Documentation

Task Documentation

You can document your task using the attributes `doc_md` (markdown), `doc` (plain text), `doc_rst`, `doc_json`, `doc_yaml` which gets rendered in the UI's Task Instance Details page.

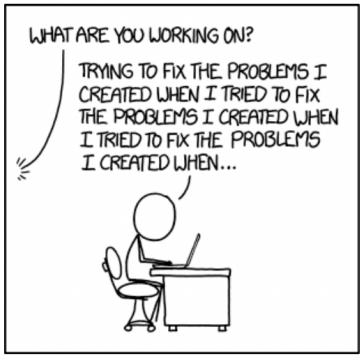
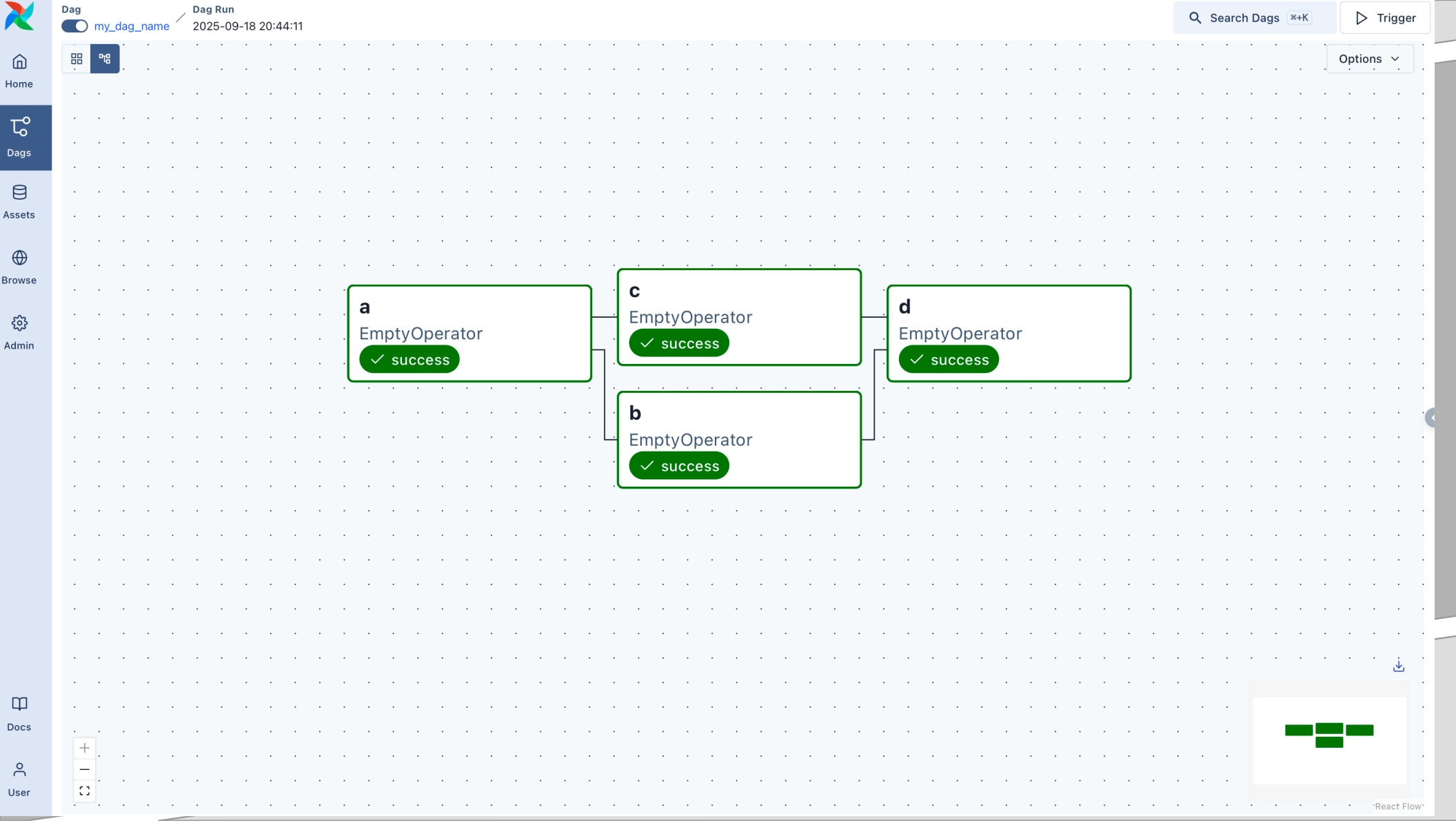
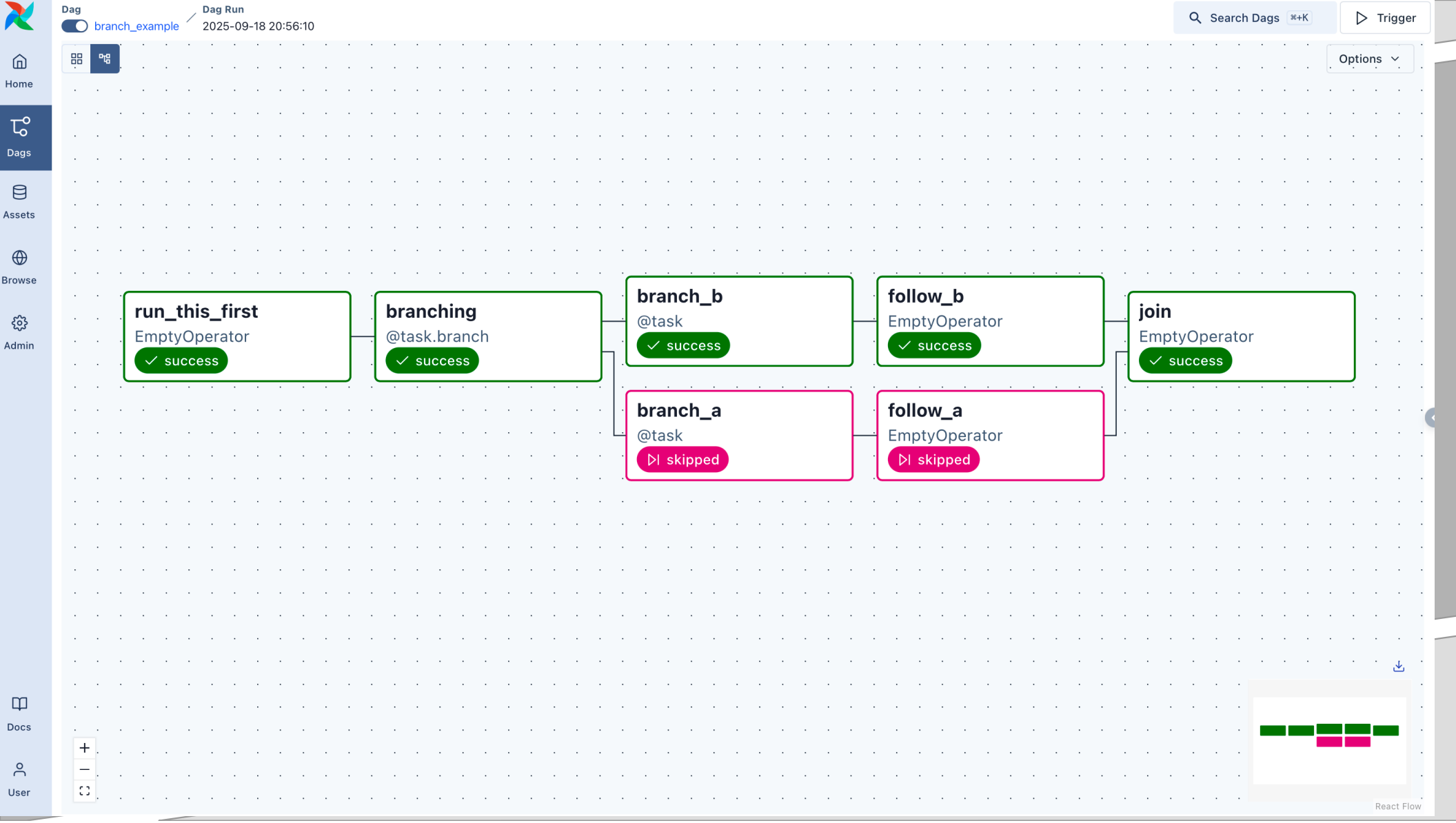


Image Credit: Randall Munroe, XKCD


Dag
my_dag_name
Dag Run
2025-09-18 20:44:11
Search Dags ⌘+K
Trigger
Options
Home
Dags
Assets
Browse
Admin
Docs
User
a
EmptyOperator
success
c
EmptyOperator
success
b
EmptyOperator
success
d
EmptyOperator
success
React Flow


Dag
branch_example
Dag Run
2025-09-18 20:56:10
Search Dags ⌘+K
Trigger
Options
Home
Dags
Assets
Browse
Admin
Docs
User
run_this_first
EmptyOperator
success
branching
@task.branch
success
branch_b
@task
success
branch_a
@task
skipped
follow_b
EmptyOperator
success
follow_a
EmptyOperator
skipped
join
EmptyOperator
success
React Flow

Questions?

Write Up

Repo