

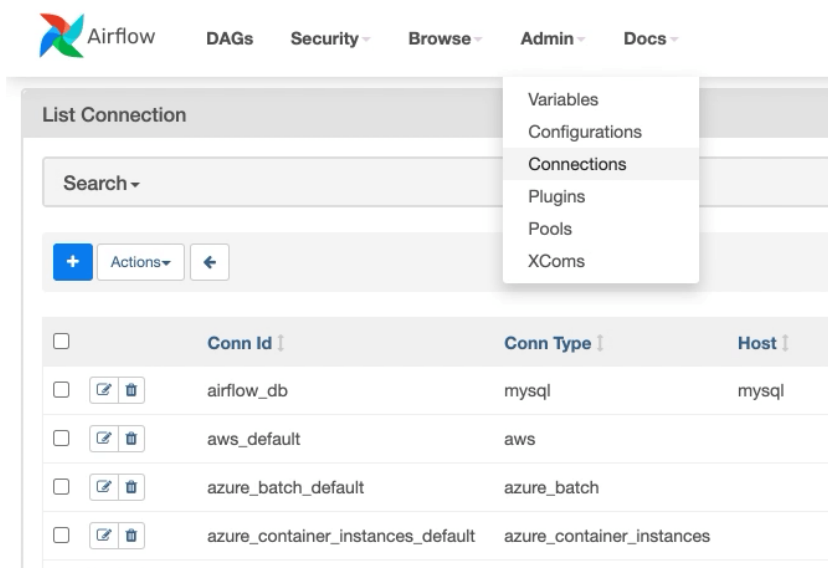


Apache Airflow Documentation

Airflow is a platform to programmatically author, schedule and monitor workflows.

Use Airflow to author workflows as Directed Acyclic Graphs (DAGs) of tasks. The Airflow scheduler executes your tasks on an array of workers while following the specified dependencies. Rich command line utilities make performing complex surgeries on DAGs a snap. The rich user interface makes it easy to visualize pipelines running in production, monitor progress, and troubleshoot issues when needed.

When workflows are defined as code, they become more maintainable, versionable, testable, and collaborative.



Principles

- **Dynamic:** Airflow pipelines are configuration as code (Python), allowing for dynamic pipeline generation. This allows for writing code that instantiates pipelines dynamically.
- **Extensible:** Easily define your own operators, executors and extend the library so that it fits the level of abstraction that suits your environment.
- **Elegant:** Airflow pipelines are lean and explicit. Parameterizing your scripts is built into the core of Airflow using the powerful **Jinja** templating engine.
- **Scalable:** Airflow has a modular architecture and uses a message queue to orchestrate an arbitrary number of workers. Airflow is ready to scale to infinity.

Beyond the Horizon

Airflow is **not** a data streaming solution. Tasks do not move data from one to the other (though tasks can exchange metadata!). Airflow is not in the [Spark Streaming](#) or [Storm](#) space, it is more comparable to [Oozie](#) or [Azkaban](#).

Workflows are expected to be mostly static or slowly changing. You can think of the structure of the tasks in your workflow as slightly more dynamic than a database structure would be. Airflow workflows are expected to look similar from a run to the next, this allows for clarity around unit of work and continuity.

[Previous](#)[Next](#)

Was this entry helpful?





Want to be a part of Apache Airflow?

[Join community](#)

[License](#) [Donate](#) [Thanks](#)

[Security](#)

© The Apache Software Foundation 2019

Apache Airflow, Apache, Airflow, the Airflow logo, and the Apache feather logo are either registered trademarks or trademarks of The Apache Software Foundation. All other products or name brands are trademarks of their respective holders, including The Apache Software Foundation.