

Set up your Deployment

An Astro Deployment is an Astro Runtime environment that is powered by the core components of Apache Airflow, including the Airflow webserver, scheduler, and one or more workers.

You can create a Deployment from a Workspace on Astro. After you create a Deployment, you can deploy DAGs to it from the Astro CLI or from a continuous delivery (CI/CD) process. All DAGs and tasks on Astro are executed within a Deployment.

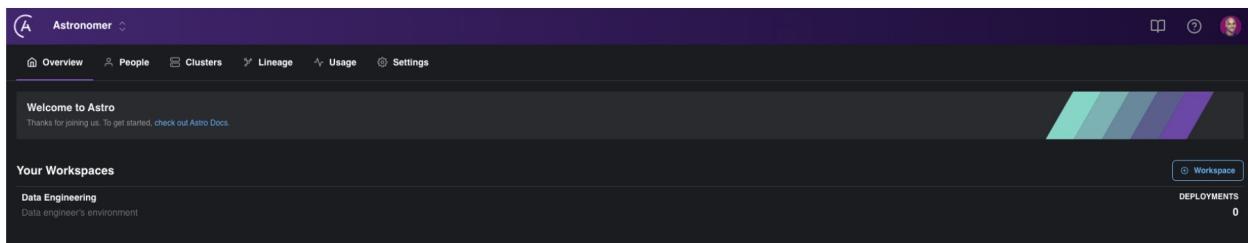
Every Deployment is hosted on a single Astro cluster with its own dedicated resources, which you can customize to meet the unique requirements of your Organization.

Prerequisites

You should have your Workspace set up from the previous activity

Create your Deployment

On the `Overview tab`, select your Workspace `Data Engineering`



On the Deployments page, click the `+ Deployment` button

Astronomer Data Engineering

Deployments

0 Deployments

No Deployments found.

SORT: Updated - Desc

Deployment

Complete the following fields:

- **Name:** dev
- **Astro Runtime:** By default, the latest version of Astro Runtime is selected. Keep this one. Notice that you can't downgrade to a lower version. If you want to do that, you will have to create a new Deployment.
- **Description:** Development environment
- **Cluster:** Select the Astro cluster in which you want to create this Deployment. You should have your cluster(s) listed here.

Astronomer Data Engineering

Deployments > New Deployment

NAME * dev

ASTRO RUNTIME 5.0.6 (based on Airflow v2.3.3)

DESCRIPTION Development Environment

CLUSTER FE - Production - US East-1

Resource Settings

WORKER RESOURCES 10 AU

SCHEDULER COUNT 1

SCHEDULER RESOURCES 5 AU

Create Deployment

Keep the resource settings by default. You will be able to add more resources later if you need to.

Click [Create Deployment](#)

The initial status of all new Deployments is [UNHEALTHY](#)

This indicates that the webserver and scheduler for the Deployment are being created in your Astro cluster. In a few minutes, the status changes to [HEALTHY](#)

Astronomer Data Engineering

Deployments > dev

Airflow Unavailable

Logs DAGs Analytics ...

UNHEALTHY	NAMESPACE ecliptical-flux-5290	CLUSTER FE - Production - US East-1	ASTRO RUNTIME 5.0.6 (based on Airflow v2.3.3)	DOCKER IMAGE 5.0.6	UPDATED a few seconds ago	CREATED a few seconds ago
0 DAGs: 0 of 0 runs failed	Tasks: 0 of 0 tasks failed	Worker CPU: 0% max of 1 CPU	Worker Memory: 0% max of 3.75GiB			

DESCRIPTION
Development Environment

Configuration

[Edit Configuration](#)

RESOURCE SETTINGS

WORKER RESOURCES	SCHEDULER RESOURCES	SCHEDULER COUNT
10 AU (1 CPU, 3.75 GiB MEM)	5 AU (0.5 CPUs, 1.88 GiB MEM)	1

▼ Environment Variables (0) [Add Variables](#)

▼ API Keys (0) [Add API Key](#)

After a few minutes, once the status is [HEALTHY](#), click on [open Airflow](#)

The screenshot shows the Astronomer Data Engineering interface. At the top, there's a purple header with the Astronomer logo and "Data Engineering". Below it, a navigation bar has "Deployments" and "dev" selected. A toolbar includes "Open Airflow", "Logs", "DAGs", "Analytics", and more. The main content area shows a summary table with columns: HEALTHY, NAMESPACE (eclipical-flux-5290), CLUSTER (FE - Production - US East-1), ASTRO RUNTIME (5.0.6 (based on Airflow v2.3.3)), DOCKER IMAGE (5.0.6), UPDATED (5 minutes ago), and CREATED (5 minutes ago). Below the table, metrics are displayed: 0 DAGs: 0 of 0 runs failed, Tasks: 0 of 0 tasks failed, Worker CPU: 0% max of 1 CPU, and Worker Memory: 0% max of 3.75GB. On the left sidebar, there are icons for Deployments, Logs, Metrics, People, and Configuration. The Configuration section is expanded, showing "DESCRIPTION" (Development Environment) and "Configuration". The "Edit Configuration" button is visible. Under "RESOURCE SETTINGS", there are sections for WORKER RESOURCES (10 AU (1 CPU, 3.75 GiB MEM)), SCHEDULER RESOURCES (5 AU (0.5 CPUs, 1.88 GiB MEM)), and SCHEDULER COUNT (1). Below these are sections for Environment Variables (0), API Keys (0), and Alert Emails (0).

Airflow

Hello Airflow on Astro 🤙

The screenshot shows the Airflow DAG list. At the top, there's a dark header with the Airflow logo and navigation links: DAGs, Browse, Admin, Docs, and Astronomer. The time is shown as 09:34 UTC. Below the header, the word "dev" is centered. The main area shows a table of DAGs. The first row is for "astronomer_monitoring_dag" owned by "airflow". It has one run listed, which was scheduled for 2022-08-10, 09:25:00 and completed at 2022-08-10, 09:30:00. The DAG status is "monitoring". There are dropdown menus for "DAG", "Owner", "Runs", "Schedule", "Last Run", "Next Run", and "Recent Tasks". A search bar and a "Filter DAGs by tag" input field are also present. At the bottom, there's a pagination bar showing page 1 of 1.

Well done! You have successfully set up your Deployment and you have a well configured Airflow instance running ready for your data pipelines 😎

Additional resources

Upgrade Astro Runtime: <https://docs.astronomer.io/astro/upgrade-runtime>

Astro Runtime release notes: <https://docs.astronomer.io/astro/runtime-release-notes>

Create a Deployment: <https://docs.astronomer.io/astro/create-deployment>

Configure Deployment resources: <https://docs.astronomer.io/astro/configure-deployment-resources>