

# 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.

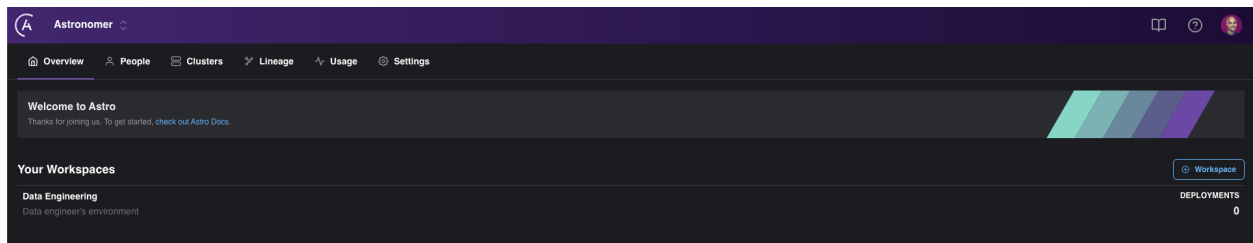
Every Deployment is hosted on a single Astro cluster with its own dedicated resources, which you can customize to meet the unique requirements of your Organization.

## Prerequisites

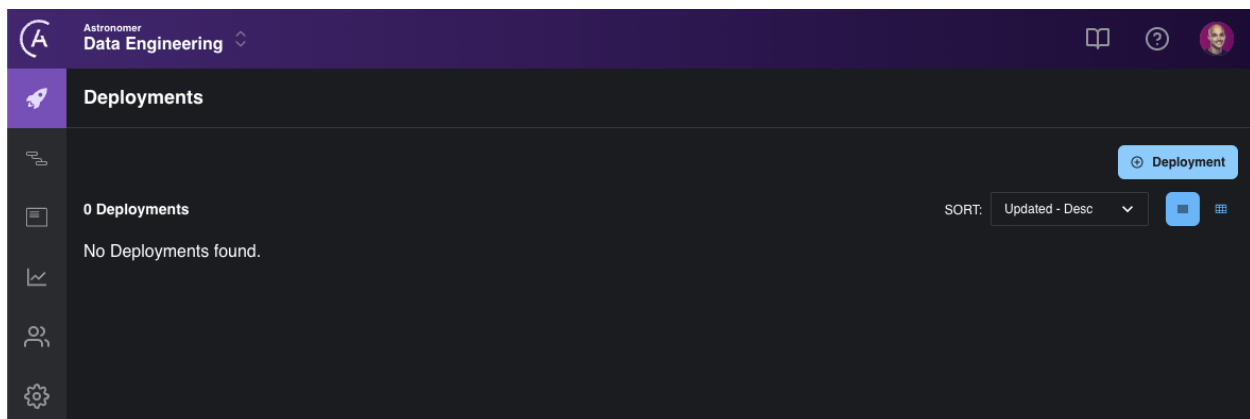
You should have your Workspace set up from the previous activity

## Create your Deployment

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

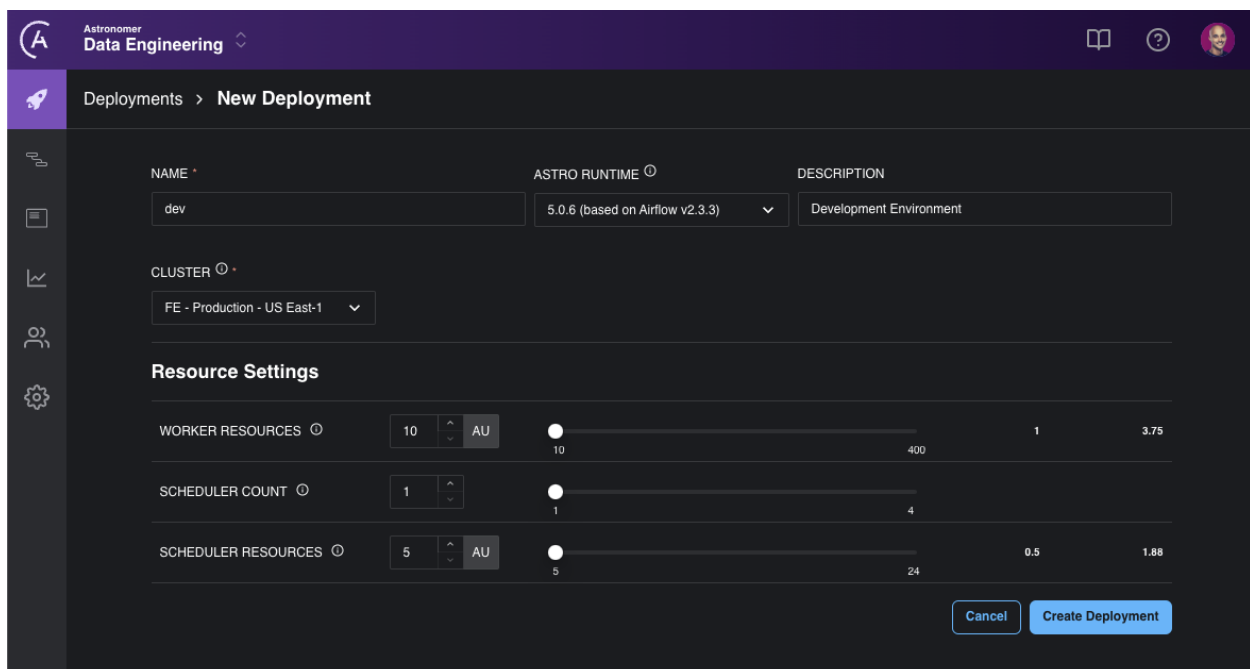


On the Deployments page, click the **+ Deployment** button



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.



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](#)

The screenshot shows the Astronomer Data Engineering console interface. At the top, the header includes the Astronomer logo, 'Data Engineering', and navigation icons. The main navigation bar shows 'Deployments > dev'. A status badge 'Airflow Unavailable' is visible. The deployment details are as follows:

STATUS	NAMESPACE	CLUSTER	ASTRO RUNTIME	DOCKER IMAGE	UPDATED	CREATED
UNHEALTHY	ecliptical-flux-5290	FE - Production - US East-1	5.0.6 (based on Airflow v2.3.3)	5.0.6	a few seconds ago	a few seconds ago

Below the table, there are four status indicators: '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 3.75GiB'. An orange arrow points to the 'UNHEALTHY' status badge. The left sidebar contains icons for deployment, logs, DAGs, and analytics. The main content area includes sections for 'DESCRIPTION' (Development Environment), 'Configuration' (with an 'Edit Configuration' link), and 'RESOURCE SETTINGS' (listing Worker Resources, Scheduler Resources, and Scheduler Count).

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

The screenshot shows the Astronomer Data Engineering console interface. At the top, the header displays 'Astronomer Data Engineering' and a user profile. The main navigation bar includes 'Deployments > dev', an 'Open Airflow' button, and links for 'Logs', 'DAGs', and 'Analytics'. The deployment status is 'HEALTHY'. A table lists deployment details: Namespace (ecliptical-flux-5290), Cluster (FE - Production - US East-1), Astro Runtime (5.0.6), Docker Image (5.0.6), Updated (5 minutes ago), and Created (5 minutes ago). Below this, a summary row shows: 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 3.75GiB. The 'DESCRIPTION' section indicates a 'Development Environment'. The 'Configuration' section has an 'Edit Configuration' link. The 'RESOURCE SETTINGS' section includes 'WORKER RESOURCES' (10 AU), 'SCHEDULER RESOURCES' (5 AU), and 'SCHEDULER COUNT' (1). At the bottom, there are expandable sections for 'Environment Variables (0)', 'API Keys (0)', and 'Alert Emails (0)', each with an 'Add' button.

# Airflow

Hello Airflow on Astro 🙌

The screenshot shows the Airflow web interface. The top navigation bar includes the Airflow logo, 'DAGs', 'Browse', 'Admin', 'Docs', and 'Astronomer', along with a UTC clock. The main header shows 'dev'. Below this, there are filters for 'All 1', 'Active 1', and 'Paused 0', a 'Filter DAGs by tag' input, and a 'Search DAGs' input. The main table lists DAGs with columns: DAG, Owner, Runs, Schedule, Last Run, Next Run, and Recent Tasks. The first DAG is 'astronomer\_monitoring\_dag' with owner 'airflow', a schedule of '\*/5 \* \* \* \*', and a last run time of '2022-08-10, 09:25:00'. The 'Recent Tasks' column shows a sequence of task status icons, with the first one highlighted in green. At the bottom, there is a pagination control showing '1' and a message 'Showing 1-1 of 1 DAGs'.

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

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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>