



Amazon Managed Workflows for Apache Airflow: What's New

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3.0



What you will learn today:

- AWS involvement in Apache Airflow project
- Core features of Amazon Managed Workflows for Apache Airflow (MWAA)
- Recent and upcoming MWAA feature releases
- How customers use MWAA today
- Resources for getting started with MWAA

AWS involvement in Apache Airflow

AWS and Open-Source Apache Airflow

*AWS OSS team dedicated to furthering
the development of Apache Airflow*



- Recent contributions:
 - Testing, bug fixing for AF 3.0, 3.1
 - Event Driven Scheduling
 - Simple Auth manager
 - Deadline alerts
- WIP contributions:
 - Deadline alerts in 3.2 w/custom callback
 - Multi-team

Overview of MWAA

3.0

Amazon MWAA

Performance & scalability



- Native AWS integrations
- Auto scaling
- Supports complex, high-concurrency DAGs
- Isolated environments

High availability & enterprise security



- Multi-AZ , high availability
- AWS-managed security updates
- IAM controls, KMS
- Built-in security and compliance

Lower overall cost of ownership



- Reduced operational costs
- Auto scaling to prevent overprovisioning
- Pay-as-you-go pricing

Fully-managed, open-source compatible



- Full access to Apache Airflow features
- Cloud agnostic
- Available on-premise
- image development on Github

MWAA core features



Run 100% OSS Apache Airflow
(no forks)



Fully Managed



Auto-scaling



Granular monitoring & observability



Compatible with
on-premise
environments



Integrated with 1P & 3P
services



Multi AZ with
automated failover



Multi-cloud ready



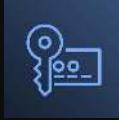
Secure & Compliant,
RBAC, HIPAA, SOC
1,2,3, PCI, DSS



Amazon S3



Amazon IAM



Amazon KMS



Amazon
CloudWatch



Amazon
SQS



Amazon
Sagemaker AI



AWS Glue



Amazon
Athena



Amazon
EMR

A live dashboard monitors the health of AWS integrations available in the Amazon Provider Package

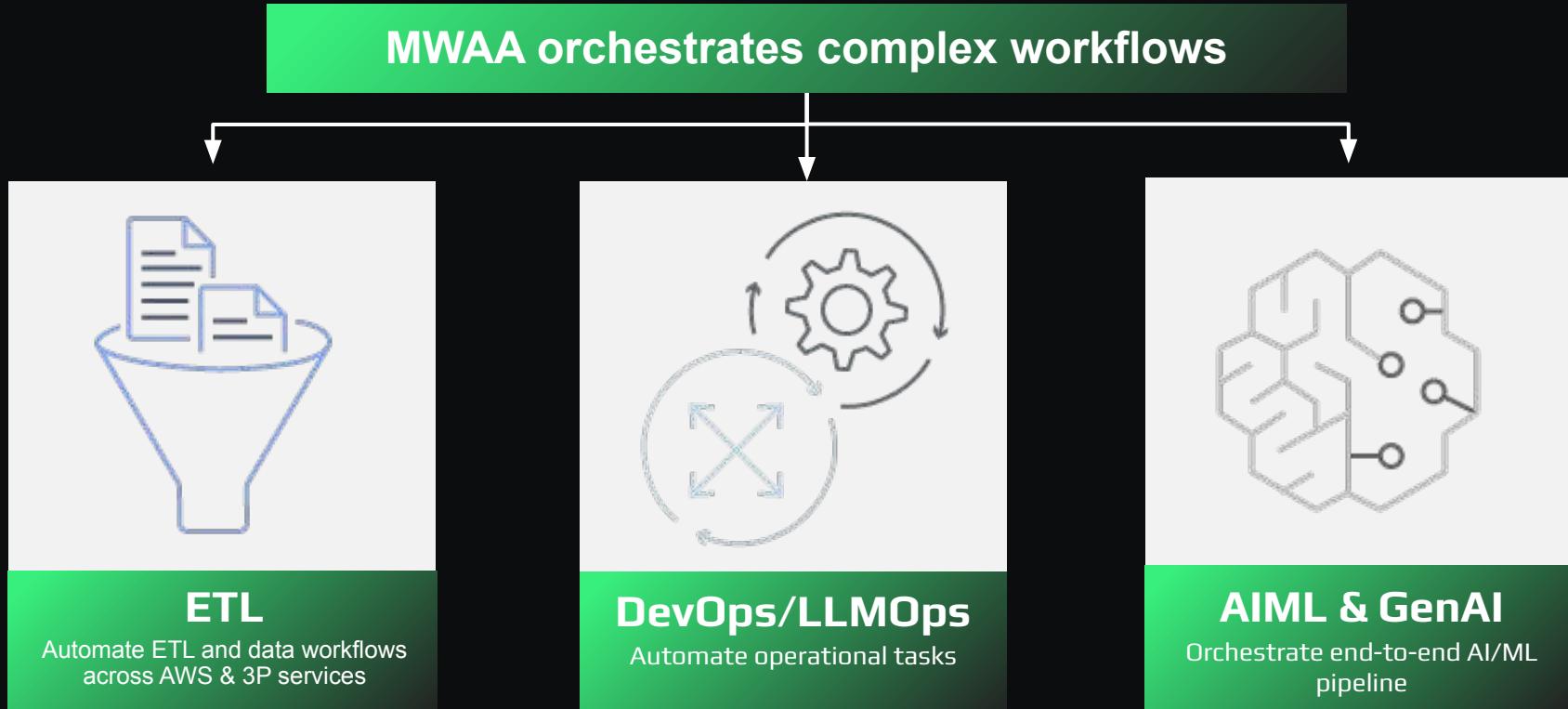
“ *With Amazon MWAA, we can focus on building reliable data pipelines that achieve business goals rather than patching and securing instances.*

Eric Smith
Data Platform Engineer



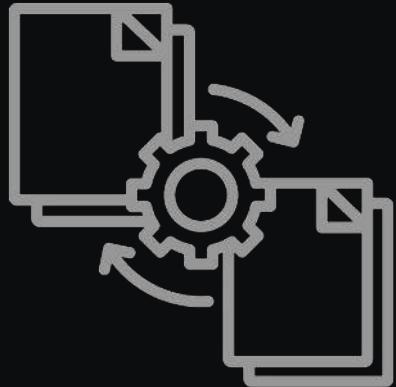
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MWAA used across a variety of use cases



What's New

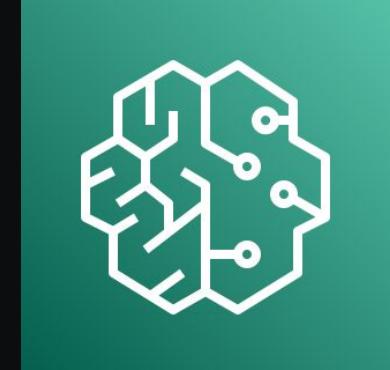
MWAA team has delivered some key features in 2025



In place version
downgrades



Graceful updates



Amazon SageMaker
Unified Studio Integration

Try it today!

Airflow 3.0 On MWAA

- Improved Security with new REST API
- Event-driven scheduling for increased agility
- Execute tasks securely in any environment
- MWAA AF3 OSS Image publicly available for local testing

Team also working on these features...



Region expansion



Maintenance window



AF 3.1 support

Wrap Up

Catch these sessions to learn more

Data & AI Orchestration at GoDaddy

 10/9/2025

 11:30 am

 Columbia C

AWS Lambda Executor: Speed of local Execution with advantages of Remote

 10/9/202

 5

 3:00 pm

Beckler



Get Started with MWAA

- **MWAA Product Page:**

<https://aws.amazon.com/managed-workflows-for-apache-airflow/>

- **MWAA Resources:**

<https://aws.amazon.com/managed-workflows-for-apache-airflow/resources/>

- **#airflow-aws Slack Channel:**

<https://apache-airflow.slack.com/>

A screenshot of the AWS website. At the top, there's a navigation bar with the AWS logo, a search bar, and links for "Agentic AI", "Discover AWS", "Products", "Solutions", "Pricing", "Resources", "Sign in to console", and "Create account". Below the navigation is a breadcrumb trail: "Amazon Managed Workflows for Apache Airflow" → "Overview" → "Features" → "Pricing" → "Getting Started" → "Resources" → "FAQs". A callout box highlights "Amazon Managed Workflows for Apache Airflow is accessible in the next generation of Amazon SageMaker". The main title is "Amazon Managed Workflows for Apache Airflow (MWAA)". Subtext reads "Secure and highly available managed workflow orchestration for Apache Airflow". A "Get started with Amazon MWAA" button is present. To the right, there's a decorative graphic of overlapping colored shapes (orange, pink, blue, green, yellow) and a play button icon.

Thank you!

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Questions?





Amazon MWAA



Amazon EMR



Amazon Athena



“

Amazon MWAA has made our workload management system scalable as we accomplish our business goals.

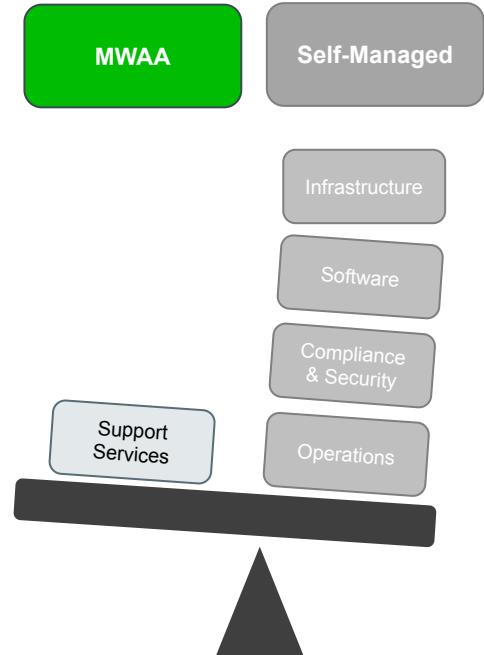
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Michael Bennett
Distinguished Software Engineer

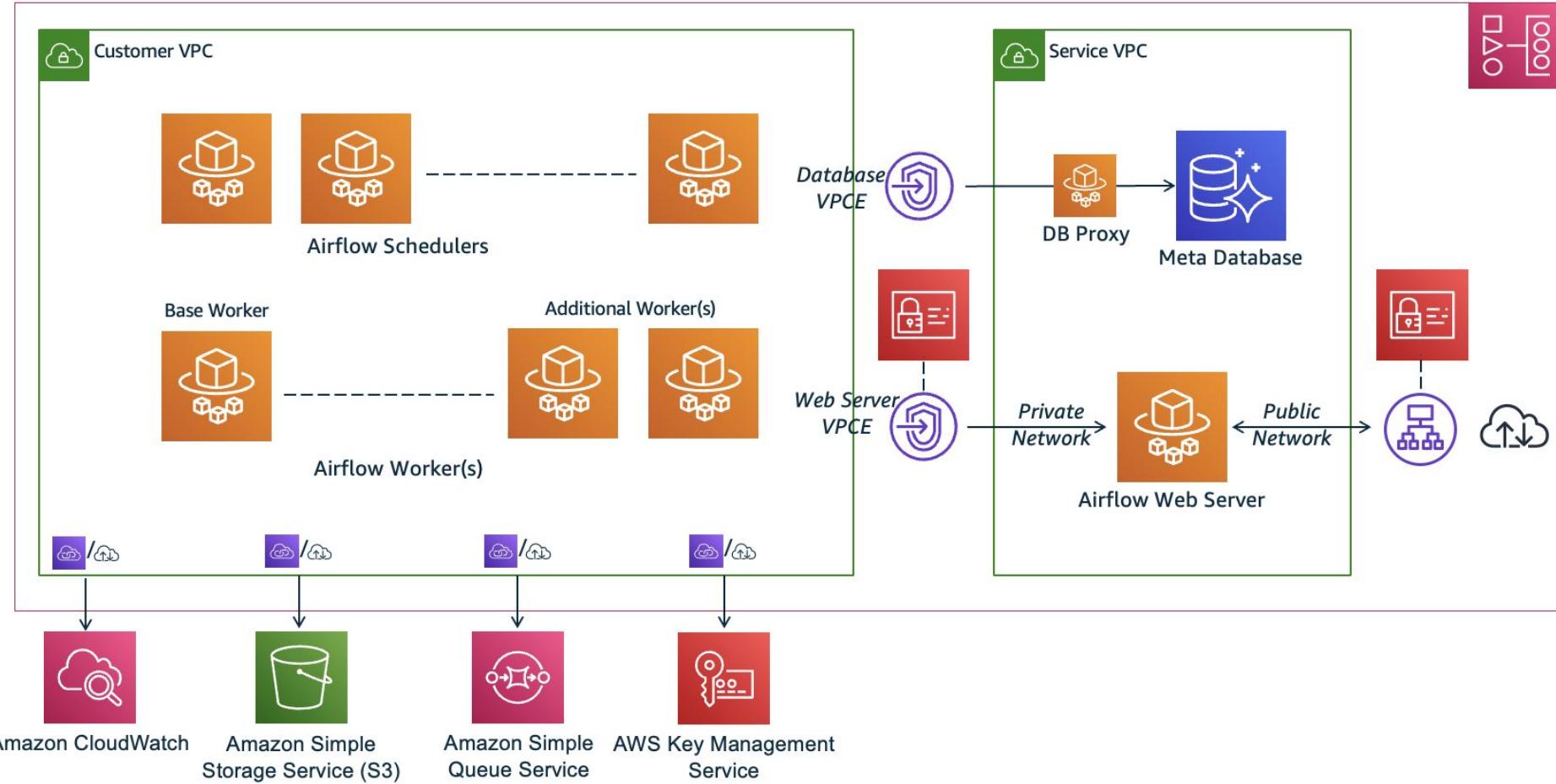
Self-managing Apache Airflow can be tedious

	Self-managed Apache Airflow	Amazon MWAA
Availability	~~~~~ Manual set up & maintenance of availability	✓ Multi-AZ w/ automated failover, managed redundancy
Built-in Compliance	✗ Additional price & effort	✓ Built-in compliance, automated encryption
Enhanced Security	✗ 	✓ IAM Auth, KMS encryption, VPC network isolation
Monitoring & Observability	✓ Manual configuration of tools & dashboards	✓ CloudWatch integration
Enhanced Performance	✗ 	✓ Autoscaling, celery executor
Reliability	~~~~~ Manual patching	✓ Automated recovery, maintenance, managed upgrades
Setup & Maintenance	~~~~~ Manual set up and maintenance	✓ automated upgrades, managed patching
Cost Management	~~~~~ Prone to overprovisioning	✓ Pay-as-you-go pricing, AWS billing native integration
Integration Scope	✓ Manual configuration, custom connectors	✓ Native AWS integrations & operators
Serverless	✗ 	✓

Example Workload



Amazon MWAA Architecture



Environment capabilities

	mw1.micro	mw1.small	mw1.medium	mw1.large	mw1.xlarge	mw1.2xlarge
Recommended Workflow Capacity	Up to 25 DAGs	Up to 50 DAGs	Up to 250 DAGs	Up to 1000 DAGs	Up to 2000 DAG	Up to 4000 DAG capacity
Scheduler vCPU	1	1	2	4	8	16
Worker vCPU	1	1	2	4	8	16
Web Server vCPU	1	1	1	2	4	8
Concurrent tasks	3 (by default)	5 (by default)	10 (by default)	20 (by default)	40 (by default)	80 (by default)
RAM	3 GB	2 GB	4 GB	8 GB	24 GB	48 GB