

# GitHub Repository Metrics Report

apache/airflow

Stars: 43847

Generated: 2026-01-14 18:45 UTC

## KPI Summary

KPI	Value	KPI	Value
Open issues	194	Closed issues	162
Open/closed ratio	0.54	Avg resolution (days)	8.87
Bug/feature ratio	2.87	Reopen rate (%)	0.0
Files analyzed	1539	Test-to-code ratio	0.22
Hotspot files	1	Stale files	0
Open security alerts	0	Signed commits (%)	99.67
Protected branches	0	Avg remediation (days)	N/A

Collection notes: issues are fetched with a page cap in PDF mode; commits are sampled from the last ~90 days; hotspot/stale detection uses the thresholds in code.

## Repository Overview

Repository: apache/airflow  
 Stars: 43847  
 Generated: 2026-01-14 18:45 UTC

## Issue & Backlog Metrics

Metric	Value
Open Issues	194
Closed Issues	162
Open Closed Ratio	0.54
Avg Resolution Time Days	8.87
Bug Issues	218
Feature Issues	76
Bug Feature Ratio	2.87
Issue Reopen Rate %	0.0
Issue Reopen Sample Size	30

### Metric metadata

Open vs Closed Issues Ratio (Backlog health):  $\text{open} / (\text{open} + \text{closed})$   
 Average Issue Resolution Time (Delivery efficiency): average days from created\_at to closed\_at for closed issues.  
 Issue Reopen Rate (Requirement clarity): % of sampled recent issues with at least one 'reopened' event (Issues Events API).  
 Bug vs Feature Ratio (Product stability): bug-labeled issues / feature-labeled issues (supports labels like 'kind:bug').  
 Issues Created vs Closed per Sprint (Throughput consistency): counts grouped by 14-day sprints starting at earliest created\_at in the fetched set.

Total Issues (open + closed): 356

### Open Issues (Oldest sample)

#	Title	Created	Age (days)	Comments	Author
58474	Manipulate partitioned asset events from task context	2025-11-19	56	1	dstandish
58490	KPO deferring unnesserially on retry	2025-11-19	56	1	johnhoran
58496	KubernetesJobOperator Duplicate Pod Race Condition	2025-11-19	56	4	rachthree
58510	API Server Opening Excessive Connections to PGBouncer and Not Closing Them	2025-11-20	55	3	tfagan25
58529	Investigate option for execution API Connections datamodel for connections with no `conn_type`	2025-11-20	55	2	amoghrajesh
58536	Task duration keeps increasing for skipped tasks due to DAG timeout	2025-11-20	55	3	karenbraganz
58550	software cccessibility	2025-11-21	54	1	RobinT1987
58553	Airflow 3 Log view displayed incorrectly	2025-11-21	54	5	melicheradam
58562	[3.x] SDK subprocess killed with SIGKILL when patching TaskInstance (ServerResponseError)	2025-11-21	54	1	wolvery

#	Title	Created	Age (days)	Comments	Author
58567	Test connection not working	2025-11-21	54	4	EbrahimKaram
58570	Celery: Task executed twice on scheduler crash due to adopt_or_reset_orphaned_tasks	2025-11-21	54	4	arkadiuszbach
58610	Add official support for InfluxDB 3 in apache-airflow-providers-influxdb	2025-11-24	51	8	arpitrathore
58625	Worker pod template image does not support image digest	2025-11-24	51	1	ja-michel
58676	Logs disappearing for deferred CloudRunExecuteJobOperator while state is deferred	2025-11-25	50	6	MarcusCramer91
58679	Problem with the sensor file	2025-11-25	50	3	EbrahimKaram
58710	Unique constraint violation when manually triggering DAG from UI since Airflow 3.1.3	2025-11-26	49	3	dabla
58717	DAG disappears in airflow 3.1.3	2025-11-26	49	10	narenjngr
58724	PythonVirtualenvOperator fails to access Variables/Connections via Task SDK in Airflow 3.1.3 on Kubernetes	2025-11-26	49	6	cetingokhan
58736	Latest KubernetesPodOperator (Ver: 10.10.0) get 403 error (Forbidden to list K8s Events)	2025-11-26	49	2	yovio-rca
58770	Cannot configure FileTaskHandler max_bytes via remote_task_handler_kwargs in Airflow 3	2025-11-27	48	1	AutomationDev85
58812	Airflow UI still thinks task is mapped task after re-running a failed DagRun	2025-11-28	47	0	dabla
58826	DatabricksWorkflowTaskGroup: "Repair single task" and "Repair all failed tasks" UI links non-functional for Databricks w	2025-11-28	47	2	brunocmartins
58886	Do not use serde library for database migrations	2025-12-01	44	5	amoghrajesh
58892	display commit under metadata header for DAGs	2025-12-01	44	2	jeremychia
58894	Airflow migration from 2.11 to 3.1.3 MySQL wrong index creation syntax	2025-12-01	44	4	vinitpayal
58906	Consistent Fernet Key Handling Strategy	2025-12-01	44	1	bugraoz93
58932	Check if airflow is mounted from Windows filesystem in Breeze	2025-12-02	43	4	potiuk
58936	In Airflow 3 interruptions of the Airflow worker pod on k8s are not handled	2025-12-02	43	0	nclaeys
58941	dbt-cloud test_connection giving 400 response code	2025-12-02	43	0	gunjisairevanth
58942	Current logical-dateless partition-driven timetable creates wrong run	2025-12-02	43	1	dstandish

### Issue Resolution Time (Longest sample)

#	Title	Created	Closed	Resolution (day)
58491	Grid View Tooltip/Hover disappears automatically	2025-11-19	2026-01-13	55
58552	apache-airflow-providers-keycloak==0.3.0 0.4.0 redirects to 127.0.0.1:8080 after a successfull login	2025-11-21	2026-01-09	48
58693	retries: 0 settings on task ignored	2025-11-25	2026-01-06	41

#	Title	Created	Closed	Resolution (day)
58796	KubernetesPodOperator do_xcom_push=True and deferrable=True does not push return_value to xcom	2025-11-28	2026-01-05	38
58808	CloudSqlDatabaseHook wrong error message on missing host (public IP)	2025-11-28	2026-01-04	37
58928	TriggerDagRunOperator: button Triggered DAG not shown	2025-12-02	2026-01-07	36
58995	Import timeouts not visible in UI	2025-12-03	2026-01-06	34
59309	UI E2E Test    DAGRUNS-001: Verify all DAG runs display	2025-12-11	2026-01-13	33
59342	Conflicting manually triggered DAG's run IDs	2025-12-11	2026-01-13	32
59366	Kubernetes Pod Operator Callbacks progress_callbacks repeat same line	2025-12-12	2026-01-08	27
59286	Keycloak: token via client_credentials flow	2025-12-10	2026-01-05	25
58771	Issues with task's logs display in AirflowUI	2025-11-27	2025-12-22	25
59348	`ApprovalOperator(assigned_users=...)` unusable with `SimpleAuthManager` when `simple_auth_manager_all_admins=True` (no	2025-12-12	2026-01-05	24
58667	Standalone DAG Processor seems unstable	2025-11-25	2025-12-19	24
59684	UI E2E Test    DAG-014: Verify DAG audit log	2025-12-21	2026-01-13	23
59465	S3DagBundle causes continuous DAG version increments despite no code changes	2025-12-15	2026-01-07	23
59259	Status of testing Providers that were prepared on December 09, 2025	2025-12-09	2026-01-02	23
58965	Debug logs of tasks are not logged even when logging level is set to DEBUG	2025-12-02	2025-12-26	23
59563	AirflowProviderDeprecationWarning: Configuration 'namespace' is deprecated.	2025-12-17	2026-01-09	22
59556	Warnings from cncf-kubernetes provider "The '*' option in section kubernetes_executor is deprecated. This configuration	2025-12-17	2026-01-09	22
59497	Delete dag run endpoint returns 204 even if run could not be deleted	2025-12-16	2026-01-07	22
58487	Translation keys are incorrectly sorted after running `--add-missing`	2025-11-19	2025-12-12	22
59553	AIRFLOW__SCHEDULER__TASK_QUEUED_TIMEOUT configuration ignored	2025-12-17	2026-01-07	21
59370	Add on_task_instance_skipped listener hookspec	2025-12-12	2026-01-03	21
59475	Directions for configuring SSO with OAuth are unclear	2025-12-15	2026-01-05	20
59229	Switch to newer OpenApi generator (7.18.0) and add auto-upgrade open-api when "ci upgrade" is run	2025-12-09	2025-12-29	20
59637	airflow.sdk.api.client.ServerResponseError: Invalid auth token: Signature has expired	2025-12-19	2026-01-07	19
59571	[helm-chart] 1.16.0: Cannot add custom volumeClaimTemplates to workers	2025-12-17	2026-01-05	19
59593	UI E2E test    DAG-012: Create backfill with all reprocess behaviour	2025-12-18	2026-01-06	18
59380	[Airflow 3.x] AIRFLOW__EMAIL__DEFAULT_EMAIL_ON_FAILURE config exists but is not read by SDK	2025-12-13	2025-12-31	18

### Issue Reopen Rate (Recent sample)

#	State	Reopens	Last Reopened
60544	open	0	
60542	open	0	
60541	open	0	
60540	open	0	
60535	open	0	
60527	open	0	
60521	open	0	
60520	open	0	
60517	open	0	
60515	open	0	
60512	open	0	
60500	open	0	
60496	open	0	
60495	open	0	
60484	open	0	
60478	open	0	
60477	open	0	
60476	open	0	
60467	open	0	
60466	open	0	
60465	open	0	
60464	open	0	
60463	open	0	
60461	closed	0	
60460	open	0	
60455	open	0	
60447	open	0	
60444	open	0	
60443	open	0	
60439	closed	0	

Issue Throughput by Sprint

Total Created: 356    Total Closed: 162

Sprint Start	Created	Closed
2025-11-19	86	29
2025-12-03	105	38

Sprint Start	Created	Closed
2025-12-17	77	29
2025-12-31	76	64
2026-01-14	12	2

Showing last 5 sprints. Full history is in [reports/issue\\_sprint\\_throughput.csv](#).

## Code Quality & Maintenance

Metric	Value
Files Analyzed	1539
Hotspot Files	1
Test To Code Ratio	0.22
Stale Files	0

## Code Churn

Total churn: 71720   Avg churn/file: 46.6

File	Churn	Commits
airflow-core/docs/img/airflow_erd.svg	12447	4
airflow-core/src/airflow/api_fastapi/auth/managers/simple/ui/package-lock.json	3735	6
airflow-core/src/airflow/api_fastapi/auth/managers/simple/ui/pnpm-lock.yaml	2684	7
dev/breeze/uv.lock	2625	5
providers/edge3/src/airflow/providers/edge3/plugins/www/pnpm-lock.yaml	2451	2
helm-tests/tests/helm_tests/airflow_core/test_worker.py	941	13
providers/google/src/airflow/providers/google/cloud/operators/gen_ai.py	865	1
airflow-core/tests/unit/api_fastapi/core_api/routes/public/test_task_instances.py	776	7
providers/openlineage/tests/unit/openlineage/utis/test_utils.py	724	1
airflow-core/tests/unit/models/test_trigger.py	670	1
helm-tests/tests/helm_tests/security/test_security_context.py	598	2
providers/ssh/src/airflow/providers/ssh/operators/ssh_remote_job.py	455	1
providers/ssh/src/airflow/providers/ssh/utis/remote_job.py	448	1
airflow-core/src/airflow/utis/db.py	437	4
providers/edge3/src/airflow/providers/edge3/cli/worker.py	426	2
airflow-core/tests/unit/cli/test_cli_parser.py	425	1
providers/common/compat/src/airflow/providers/common/compat/standard/operators.py	424	2
airflow-core/src/airflow/ui/pnpm-lock.yaml	417	2
dev/react-plugin-tools/react_plugin_template/src/theme.ts	409	2
providers/openlineage/src/airflow/providers/openlineage/utis/utis.py	396	3
chart/values.schema.json	372	14
airflow-core/src/airflow/ui/src/pages/DagsList/DagsFilters/DagsFilters.tsx	371	3
airflow-core/src/airflow/dag_processing/importers/python_importer.py	360	1
providers/standard/tests/unit/standard/operators/test_python.py	357	3
providers/edge3/tests/unit/edge3/cli/test_worker.py	345	3

File	Churn	Commits
providers/google/tests/system/google/cloud/gen_ai/example_gen_ai_gemini_batch_api.py	341	1
providers/ssh/tests/unit/ssh/operators/test_ssh_remote_job.py	331	1
airflow-core/src/airflow/dag_processing/dagbag.py	330	2
scripts/ci/prek/check_shared_distributions_usage.py	312	1
shared/plugins_manager/src/airflow_shared/plugins_manager/plugins_manager.py	307	2
airflow-core/src/airflow/ui/tests/e2e/pages/BackfillPage.ts	305	2
airflow-core/src/airflow/plugins_manager.py	301	4
airflow-core/src/airflow/ui/src/layouts/Details/Grid/TaskNames.tsx	286	2
providers/ssh/src/airflow/providers/ssh/triggers/ssh_remote_job.py	271	1
airflow-core/src/airflow/jobs/scheduler_job_runner.py	271	4
scripts/in_container/benchmark_cli_latency.py	271	1
airflow-core/src/airflow/dag_processing/importers/base.py	266	1
providers/ssh/docs/operators/ssh_remote_job.rst	264	1
airflow-core/src/airflow/ui/src/components/FilterBar/filters/DateRangeFilter.test.tsx	263	2
providers/edge3/src/airflow/providers/edge3/cli/definition.py	261	1
providers/google/tests/unit/google/cloud/operators/test_gen_ai.py	259	1
providers/ssh/tests/unit/ssh/utils/test_remote_job.py	254	1
providers/celery/src/airflow/providers/celery/cli/definition.py	254	1
providers/amazon/tests/unit/amazon/aws/operators/test_ssm.py	240	1
providers/edge3/tests/unit/edge3/cli/test_definition.py	236	1
airflow-core/src/airflow/ui/tests/e2e/pages/EventsPage.ts	230	1
airflow-ctl-tests/tests/airflowctl_tests/test_airflowctl_commands.py	225	3
task-sdk/tests/task_sdk/execution_time/test_task_runner.py	223	6
helm-tests/tests/helm_tests/airflow_core/test_scheduler.py	222	3
providers/celery/src/airflow/providers/celery/executors/celery_executor.py	222	1
providers/cncf/kubernetes/tests/unit/cncf/kubernetes/operators/test_job.py	221	3
providers/edge3/src/airflow/providers/edge3/cli/edge_command.py	214	2
providers/snowflake/src/airflow/providers/snowflake/hooks/snowflake.py	204	3
airflow-core/tests/unit/jobs/test_scheduler_job.py	204	3
providers/amazon/tests/unit/amazon/aws/operators/test_emr_serverless.py	203	1
providers/ssh/tests/unit/ssh/triggers/test_ssh_remote_job.py	197	1
shared/module_loading/src/airflow_shared/module_loading/file_discovery.py	197	1
airflow-core/tests/unit/api_fastapi/core_api/routes/ui/test_grid.py	195	1
airflow-core/src/airflow/ui/src/pages/DagsList/DagsFilters/StateFilters.tsx	194	2



File	Churn	Commits
airflow-core/src/airflow/utils/file.py	193	1
providers/google/tests/unit/google/cloud/operators/test_dataproc.py	192	3
providers/google/docs/operators/cloud/gen_ai.rst	189	1
airflow-core/src/airflow/ui/tests/e2e/pages/DagRunsPage.ts	188	1
helm-tests/tests/helm_tests/airflow_aux/test_pod_template_file.py	188	3
providers/google/src/airflow/providers/google/cloud/hooks/gen_ai.py	188	1
airflow-core/src/airflow/ui/src/layouts/Details/Gantt/Gantt.tsx	187	2
scripts/ci/prek/check_cli_definition_imports.py	186	1
providers/google/tests/unit/google/cloud/hooks/test_gen_ai.py	184	1
airflow-core/src/airflow/ui/tests/e2e/specs/backfill.spec.ts	176	2
airflow-core/src/airflow/ui/src/hooks/navigation/useNavigation.ts	172	3
providers/ssh/tests/unit/ssh/hooks/test_ssh_async.py	172	1
providers/celery/tests/unit/celery/cli/test_definition.py	170	1
chart/values.yaml	169	15
airflow-core/tests/unit/dag_processing/test_dagbag.py	165	3
airflow-core/src/airflow/models/taskinstance.py	165	2
shared/listeners/tests/listeners/test_listener_manager.py	164	1
airflow-core/src/airflow/ui/tests/e2e/specs/dag-audit-log.spec.ts	161	1
airflow-core/src/airflow/ui/src/layouts/Details/Grid/Grid.tsx	161	3
airflow-core/tests/unit/api_fastapi/execution_api/versions/head/test_task_instances.py	154	1
chart/templates/NOTES.txt	152	8
airflow-core/src/airflow/api_fastapi/auth/managers/simple/ui/openapi-gen/queries/queries.ts	152	2
airflow-core/src/airflow/ui/tests/e2e/specs/dag-runs.spec.ts	146	1
providers/standard/tests/unit/standard/decorators/test_python.py	146	3
airflow-core/src/airflow/ui/src/pages/DagsList/DagsFilters/FavoriteFilter.tsx	145	2
task-sdk/src/airflow/sdk/execution_time/comms.py	144	2
generated/provider_metadata.json	144	1
providers-summary-docs/core-extensions/cli-commands.rst	143	1
providers/ssh/src/airflow/providers/ssh/hooks/ssh.py	142	1
airflow-core/src/airflow/api_fastapi/auth/managers/simple/ui/openapi-gen/requests/services.gen.ts	141	1
airflow-ctl/docs/images/output_connections.svg	141	1
shared/module_loading/tests/module_loading/test_file_discovery.py	139	1
airflow-core/src/airflow/ui/tests/e2e/specs/asset.spec.ts	138	1
task-sdk/src/airflow/sdk/bases/operator.py	135	4

File	Churn	Commits
task-sdk/src/airflow/sdk/plugins_manager.py	135	2
airflow-core/src/airflow/cli/cli_parser.py	135	1
airflow-core/src/airflow/ui/src/layouts/Details/Grid/TaskInstancesColumn.tsx	134	2
task-sdk/src/airflow/sdk/execution_time/callback_runner.py	134	2
providers/discord/src/airflow/providers/discord/notifications/embed.py	134	1
providers/openlineage/src/airflow/providers/openlineage/plugins/listener.py	133	3
providers/standard/src/airflow/providers/standard/operators/python.py	132	2

Top 100 files by churn. Full listing is in reports/code\_churn\_by\_file.csv.

### Hotspot Files

File	Churn	Commits
helm-tests/tests/helm_tests/airflow_core/test_worker.py	941	13

## Security & Compliance

Metric	Value
Open Security Alerts	0
Avg Remediation Time Days	N/A
Signed Commits Percentage	99.67
Protected Branches	0

Note: Dependabot Alerts may be inaccessible for some repos/tokens; in that case the CSV will show 0 alerts.

### Metric metadata

Open security alerts (Dependabot): count of open alerts returned by the Dependabot Alerts API.

Time to remediate vulnerabilities: average days between created\_at and fixed\_at for fixed alerts (if available).

Signed commits percentage: % of recent commits whose verification.verified == true.

Protected branches count: number of branches where the branch protection endpoint returns data.

### Signed Commits (Sample)

SHA	Date	Author	Verified
41f3dfec49	2026-01-14T17:14:04Z	Anshu Singh	True
a9dbe4e983	2026-01-14T17:09:52Z	Wei Lee	True
815f38704b	2026-01-14T16:43:07Z	Henry Chen	True
62f28049c7	2026-01-14T16:10:52Z	Pratiksha	True
f94039b365	2026-01-14T15:17:25Z	Jarek Potiuk	True
326906e5af	2026-01-14T15:17:03Z	Jarek Potiuk	True
df25470bb7	2026-01-14T14:31:48Z	RickyChen / ■■■■	True
cbaa369c32	2026-01-14T14:25:10Z	Dominik	True
4809f4e448	2026-01-14T14:08:14Z	Ephraim Anierobi	True
10ffe8a841	2026-01-14T13:28:16Z	Ephraim Anierobi	True
33cc0ac434	2026-01-14T10:42:52Z	Bugra Ozturk	True
76cc6de9ee	2026-01-14T09:01:41Z	Sarthak Vaish	True
acffa62713	2026-01-13T23:18:08Z	Jens Scheffler	True
e774790e6f	2026-01-13T22:10:18Z	Ephraim Anierobi	True
7bcc131a6f	2026-01-13T22:06:32Z	Jarek Potiuk	True
5a9c2f0718	2026-01-13T21:41:03Z	Niko Oliveira	True
ae98746842	2026-01-13T21:36:11Z	Elad Kalif	True
00c4ac6871	2026-01-13T20:08:38Z	Bugra Ozturk	True
ec441299d3	2026-01-13T19:32:54Z	Kaxil Naik	True
5b4908d792	2026-01-13T19:08:58Z	Zach	True
934409f51d	2026-01-13T19:08:18Z	Shubham Raj	True

SHA	Date	Author	Verified
66504ffb83	2026-01-13T18:23:02Z	dependabot[bot]	True
92a69564a7	2026-01-13T17:13:50Z	Ephraim Anierobi	True
a1872e1866	2026-01-13T16:59:27Z	Haseeb Malik	True
13f3e267fb	2026-01-13T16:53:11Z	Steve Ahn	True
d10138d762	2026-01-13T15:05:25Z	Ephraim Anierobi	True
2a98b0b7fb	2026-01-13T14:54:38Z	dependabot[bot]	True
fcd767971e	2026-01-13T14:39:52Z	Brent Bovenzi	True
ee15065e57	2026-01-13T13:42:18Z	Ephraim Anierobi	True
34bfa821f3	2026-01-13T13:17:21Z	Pierre Jeambrun	True

### Branch Protection (Sample)

Branch	Protected
3.1.4-patch	False
3.1.5-docs	False
add-openlineage-config-spark-submit	False
asset-event-extra	False
backport-2ccd348-v3-1-test	False
backport-3f0885e-v3-1-test	False
backport-7bcc131-v3-1-test	False
backport-7c98af3-v3-1-test	False
backport-7f07c31-v3-1-test	False
backport-8ae779d-v3-1-test	False
backport-8ec7601-v3-1-test	False
backport-41f3dfe-v3-1-test	False
backport-62f2804-v3-1-test	False
backport-91af86e-v3-1-test	False
backport-93dfcde-v3-1-test	False
backport-1914cff-v3-1-test	False
backport-2496a03-v3-1-test	False
backport-9815da8-v3-1-test	False
backport-46472e5-v3-1-test	False
backport-9890784-v3-1-test	False
backport-ab803b8-v3-1-test	False
backport-af27f43-v3-1-test	False
constraints-1-10	False

Branch	Protected
constraints-2-0	False
constraints-2-1-fixed	False
constraints-2-1	False
constraints-2-2-2-fixed	False
constraints-2-2-3-fixed	False
constraints-2-2	False
constraints-2-3	False