

Events: A Closer Look

Diving Deeper Into Workflow Triggers

- ▶ Controlling Workflow Execution with Event Filters
- ▶ Detailed Control with Activity Types
- ▶ Examples!

Available Events

Repository-related

push

Pushing a commit

pull_request

Pull request action
(opened, closed, ...)

create

A branch or tag was
created

fork

Repository was
forked

issues

An issue was opened,
deleted, ...

issue_comment

Issue or pull request
comment action

watch

Repository was
starred

discussion

Discussion action
(created, deleted, ...)

Many More!

Other

workflow_dispatch

Manually trigger
workflow

repository_dispatch

REST API request
triggers workflow

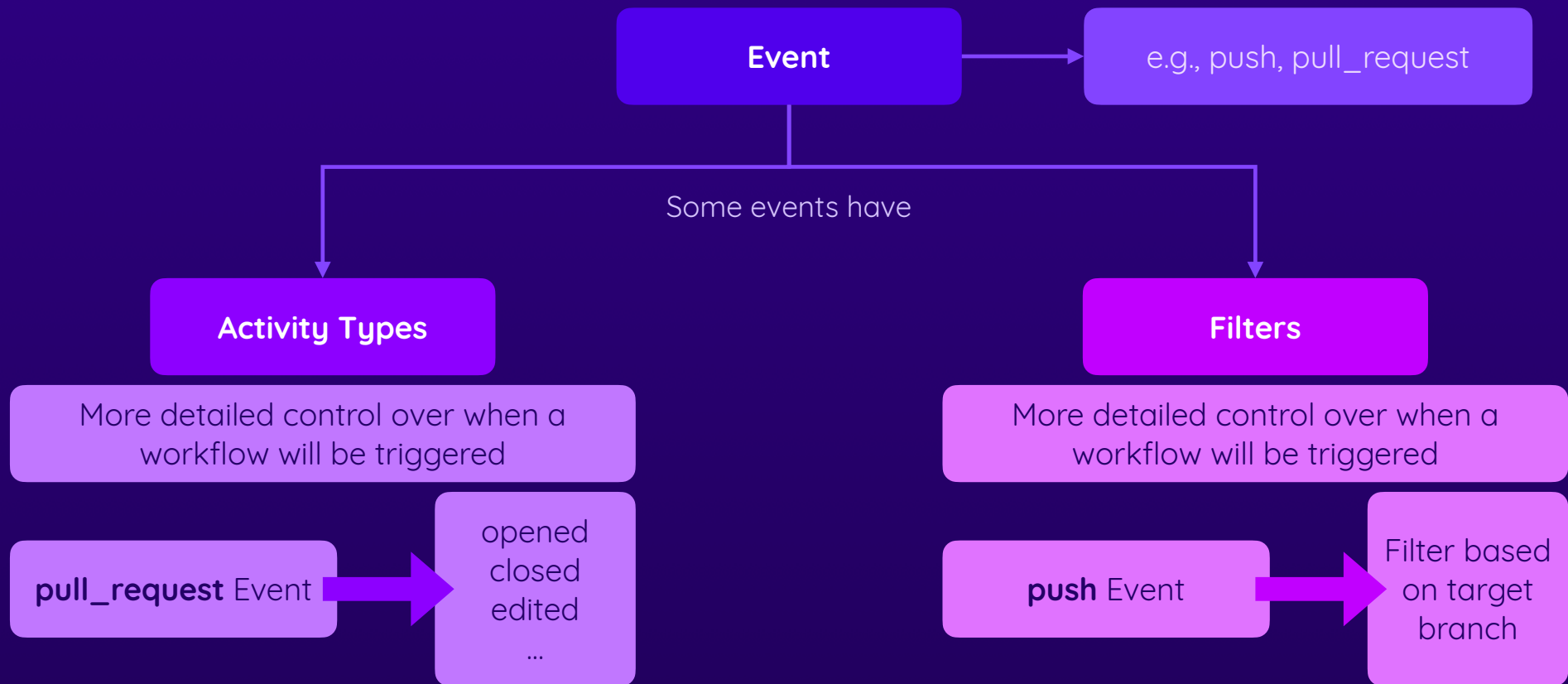
schedule

Workflow is scheduled

workflow_call

Can be called by other
workflows

Event Activity Types & Filters



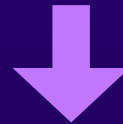
A Note About Fork Pull Request Workflows

By default, Pull Requests based on Forks do NOT trigger a workflow



Reason: Everyone can fork & open pull requests

Malicious workflow runs & excess cost could be caused



First-time contributors must be approved manually

Cancelling & Skipping Workflow Runs



Cancelling

By default, Workflows get cancelled if Jobs fail

By default, a Job fails if at least one Step fails

You can also cancel workflows manually



Skipping

By default, all matching events start a workflow

Exceptions for “push” & “pull_request”

Skip with proper commit message

Module Summary

Available Events

There are many supported events

Most are repository-related (e.g.,
push, pull_request)

But some are more general (e.g.,
schedule)

Pull Requests & Forks

Initial approval needed for pull
requests from forked repositories

Avoids spam from untrusted
contributors

Activity Types

The exact type of event that
should trigger a workflow

Examples: Opening or editing a
pull request should trigger the wf

Cancelling & Skipping

Workflows get cancelled
automatically when jobs fail

You can manually cancel
workflows

You can skip via [skip ci] etc. in
commit message

Event Filters

For push & pull_request: Add
filters to avoid some executions

Filter based on target branch and
/ or affected file paths

Exercise Time!

1

Test & Deploy For “main” Pushes & Manual Trigger

Goal: Run Workflow if a
commit is pushed to the
“main” branch

Ignore push events for other
branches

Variation

Also run for “dev” branch and
DON'T run if workflow files
were edited

2

Run Tests Upon Pull Requests

Goal: Run Workflow if a
collaborator pull_request is
opened

Only run for pull_requests
targeting the “main” branch

Variation

Also run for “dev” branch