

TO BUILD A FIRE

AI MADE CODE CHEAP.
HUMAN ATTENTION IS SCARCE.



GitLab



Google Cloud

ANTHROPIC

An attention router for merge requests

TRACK A / START FRESH

Two changes. Different attention.

2,438

lines of generated files and formatting

2

lines changing authorization

Claims and evidence determine the review route

Illustrative comparison

A clear review plan

CHANGE
Merge request !2
gitlab-ai-hackathon/transcend-october-2026/1688368/showcase

MR	!2
Head SHA	e843e0d8128f5c6363d47e6272850fb709e4badc
Changed paths	1
Policy	service-review - v1

src/auth.py

ATTENTION ROUTE
TARGETED REVIEW
Specific consequential claims remain unresolved and need focused human review.
Why this route
Required check failed: authorization-invariants

Capacity	Known demand	Still uncovered
90 min	35 min	0 min

Schedule state: Within capacity

RECORDED MR !2 SNAPSHOT

A specific route. The reason behind it. The claims that deserve a person.

Human attention is scarce

TO BUILD A FIRE allocates finite review capacity to consequential uncertainty.

ATTENTION AS AN ENGINEERING RESOURCE

The review plan

01

What changed?

02

Which properties matter?

03

What does the evidence establish?

04

Where does a person focus?

Agents

observe.

Evidence

verifies.

Policy

routes.

People

decide.

Three explainable attention routes



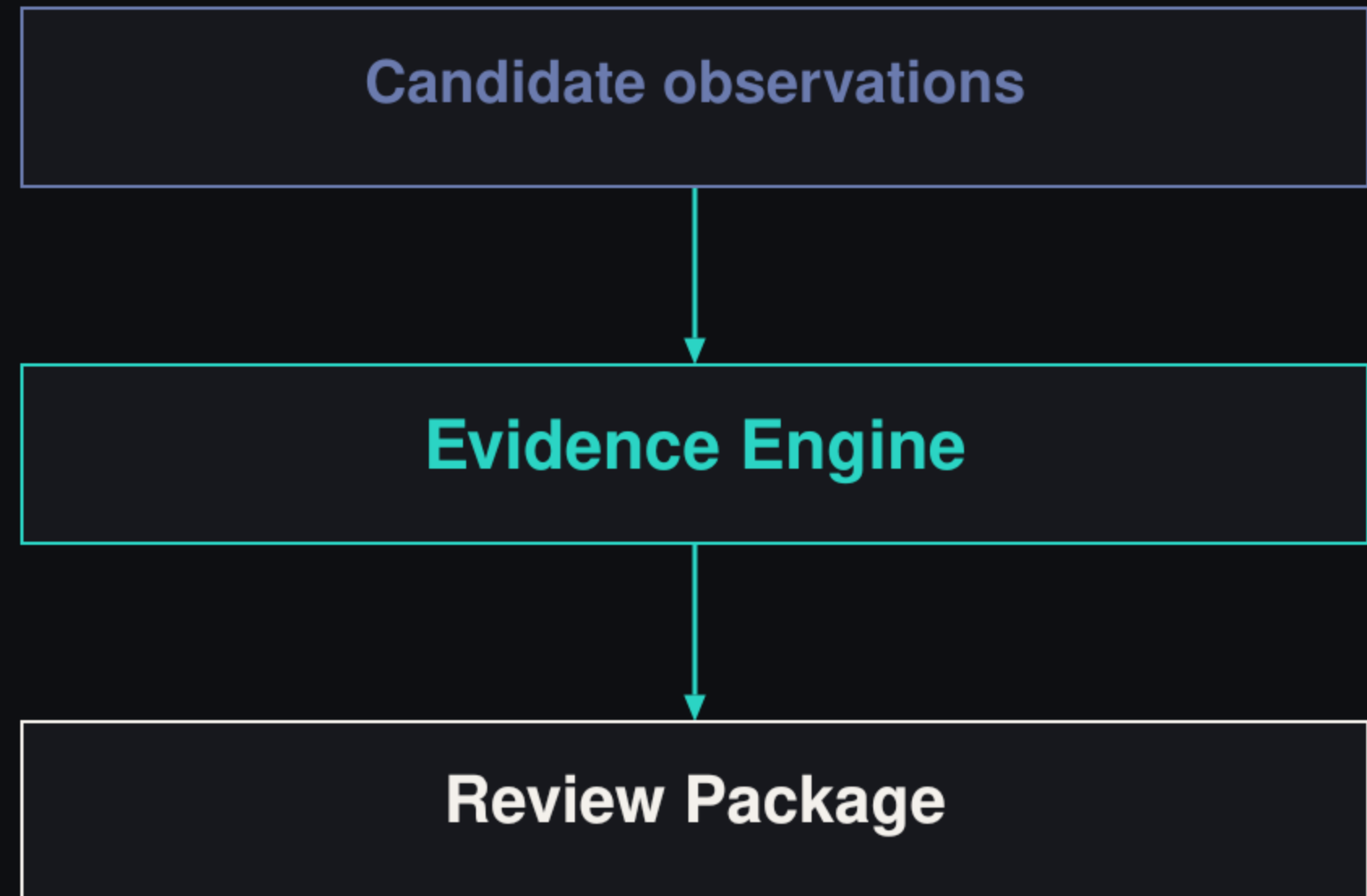
Every route leads to a human decision

Observations become bounded evidence

CHANGE MAPPER

Candidate observations

Agents investigate a merge request and propose claims for verification.



Evidence has a precise vocabulary

SUPPORTED

Checks support the declared claim.

UNRESOLVED

The claim requires further resolution.

CONTRADICTED

Evidence contradicts the declared claim.

NOT_RUN

The check did not run.

The Review Package

One versioned record

A shared internal contract carries evidence between components.

Claims

Evidence and checks

Human review tasks

Candidate observations

The claim and the check, together

POLICY CLAIMS1

What remains unresolved

authorization-boundaryUNRESOLVED

can_read_record denies unauthenticated users and authenticated non-owner non-admins, and permits authenticated owners or admins.
Open reasons: Required check failed: authorization-invariants

VERIFICATION1

Evidence recorded

authorization-invariantsFAIL

tbaif-static-auth-invariants 1 - Static AST interpretation of src/auth.py:can_read_record over all eight combinations of authenticated, admin, and owner booleans in the supported expression subset. This does not prove repository-wide imports, runtime reachability, or authorization behavior outside this function.

FAIL: expected authorization behavior violated in authenticated_non_owner_denied (authenticated=true, admin=false, owner=false)

The Explorer links the authorization claim to the recorded verification result.

Every route has a reason

Claims

What the change affects

Declared properties define the review question.

Evidence

What checks established

Recorded results support specific claims.

Policy

Why attention goes here

Deterministic rules explain the selected route.

A review schedule grounded in capacity

ILLUSTRATIVE EXAMPLE

180

review minutes available

267

minutes of estimated demand



180 min scheduled

87 min uncovered

Scheduled minutes describe allocated review time.

Capacity in the actual review route

Recorded MR !2 snapshot

ATTENTION ROUTE

TARGETED REVIEW

Specific consequential claims remain unresolved and need focused human review.

Why this route

Required check failed: authorization-invariants

Capacity

90 min

Schedule state: Within capacity

Known demand

35 min

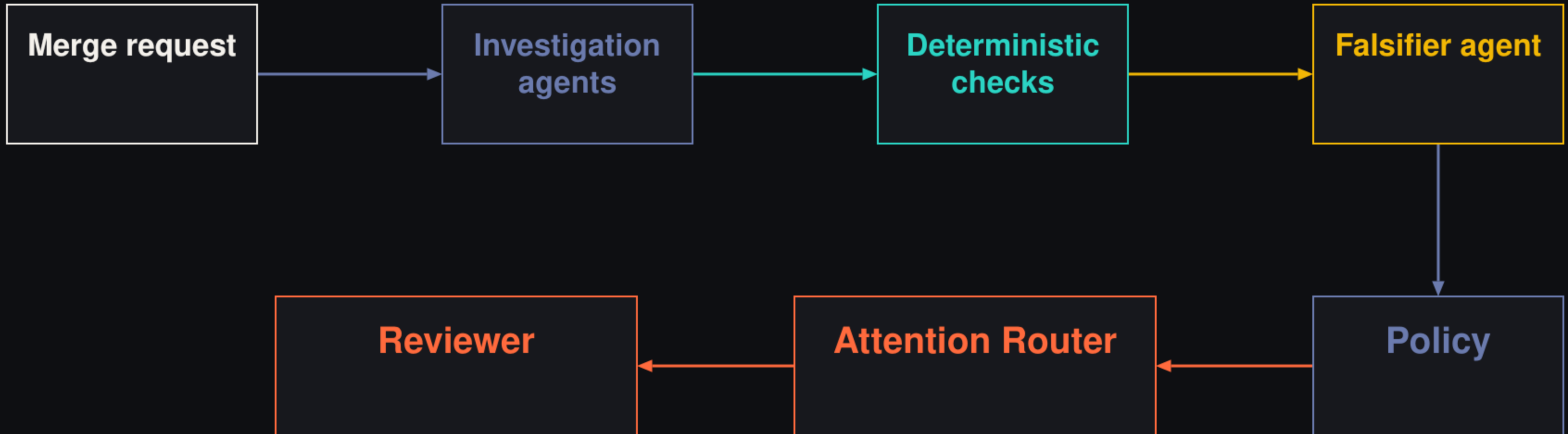
Still uncovered

0 min

Focused
human
review

The report puts review capacity beside the route and its explanation.

The complete review sequence



Evidence and Policy determine routing. A person records the final disposition.

A claim worth challenging

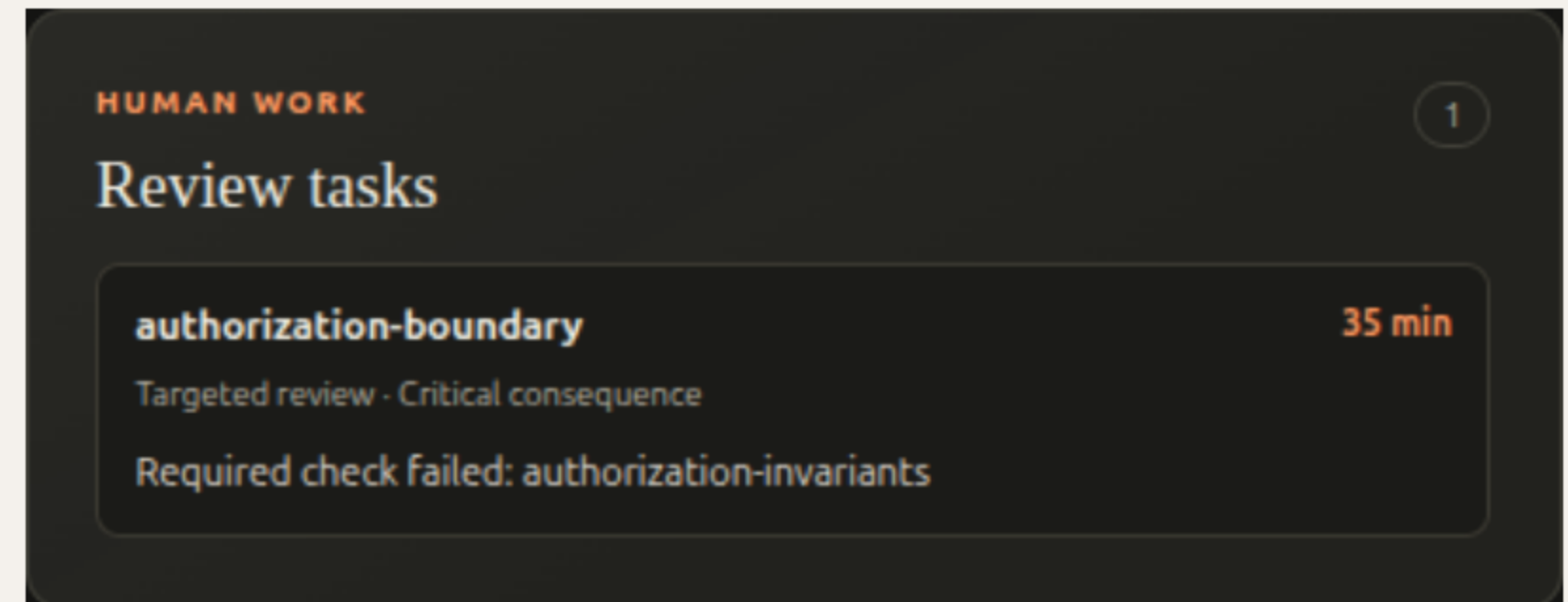
The Falsifier agent proposes candidate counterexamples that challenge claims and evidence.

Policy governs the route. People resolve the change.

Human judgment has a defined place

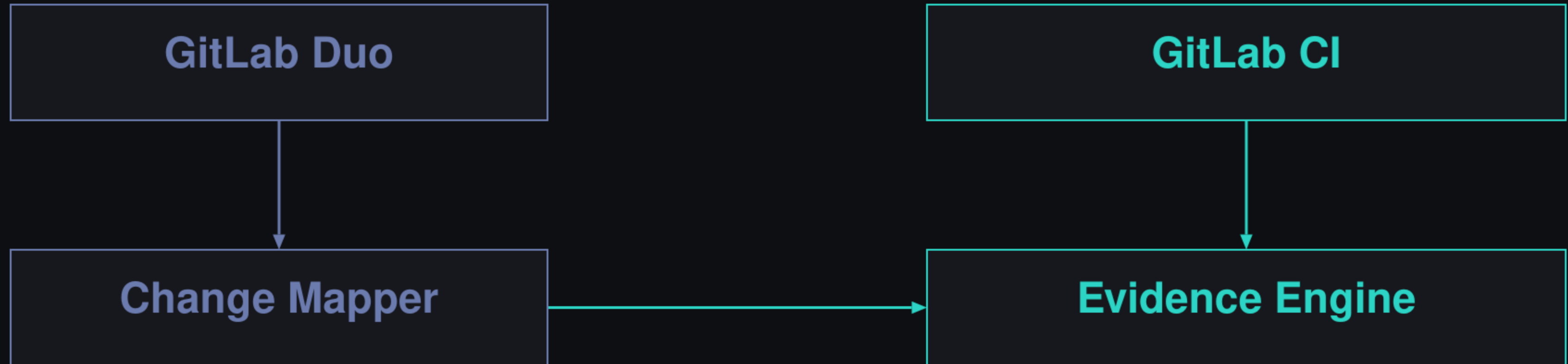
Consequential uncertainty

Reviewers resolve the claim and record the disposition.



Actual review task from recorded MR !2

Evidence from the GitLab pipeline



Candidate observations
under human approval

Checks include SAST and a
bounded authorization check

Review Package Explorer

A REVIEW PLAN FROM GITLAB CI

Turn CI results into a clear review plan.

TO BUILD A FIRE turns evidence collected for a GitLab merge request (MR) into a review plan: what changed, which checks ran, and what still needs a person. This page displays that report; it does not connect to GitLab.

Agent-written observations remain in their original language.

THE PROCESS

How it works

- 1

Start a snapshot run for the MR
A GitLab pipeline uses the MR number to gather changed files and results from configured checks.
- 2

The pipeline creates a report
The output is a file named `review-package.json`. You do not write this file yourself.
- 3

Open the report here
Download `review-package.json` from the `attention-router-mr-snapshot` job and choose it below, or open the recorded snapshot. Files stay on your device.

START HERE

Try the report viewer

Open a recorded snapshot of a real merge request, or the report generated by your GitLab pipeline.

No report open. Open the recorded snapshot or a downloaded pipeline report.

See recorded MR !2 snapshot

Open downloaded CI report

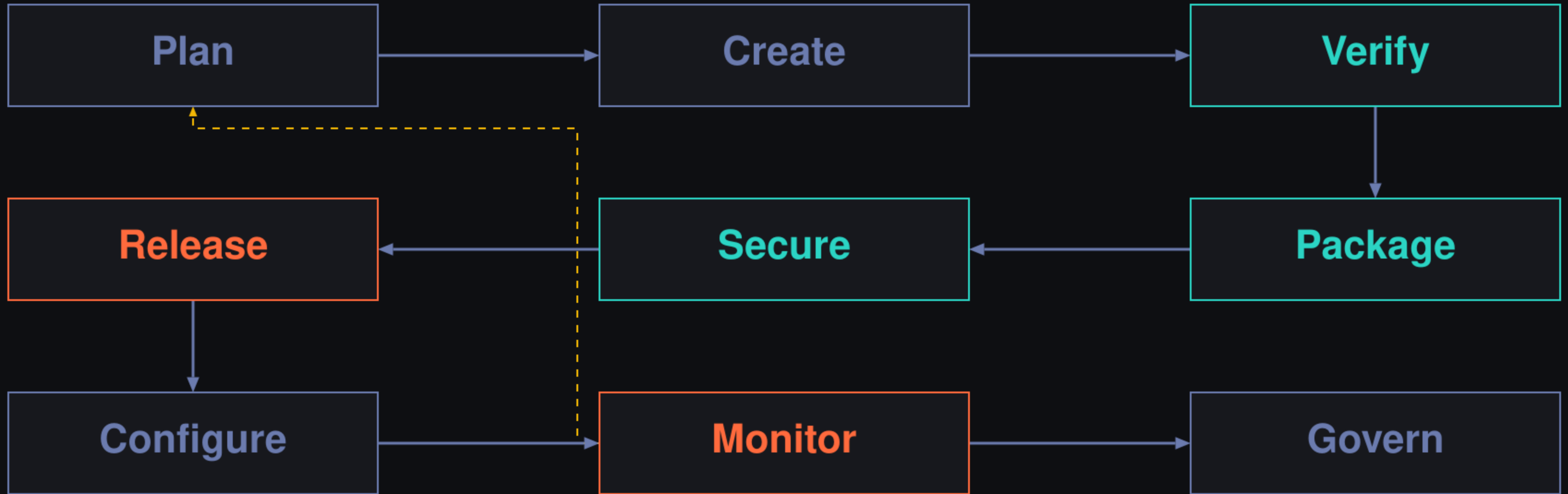
A clear place to review

Open the report generated by a GitLab pipeline or inspect a recorded snapshot.

ENGLISH / SPANISH

LIGHT / DARK

The post-code lifecycle



Monitor feeds the next plan

Assisted autonomy

Track A / Start Fresh

GitLab Showcase hosts the integration.
GitHub provides the synchronized public mirror.

Four connected stages of evolution

ROADMAP

01

One change, end to end

Nine stages with human gates.

02

Team attention scheduler

Allocate capacity across merge requests.

03

Approved repair

Re-evaluate, release and monitor.

04

Repository portfolio

Cross-project contracts and shared learning.

Deterministic core. Local viewer.

PYTHON

Deterministic routing

The core produces a SHA-256-addressed receipt.

BROWSER

Evidence stays on the device

The Explorer reads the Review Package locally.

TO BUILD A FIRE

The fire is human attention

Agents observe. Evidence verifies.
Policy routes. People decide.

Inspired by Jack London's To Build a Fire