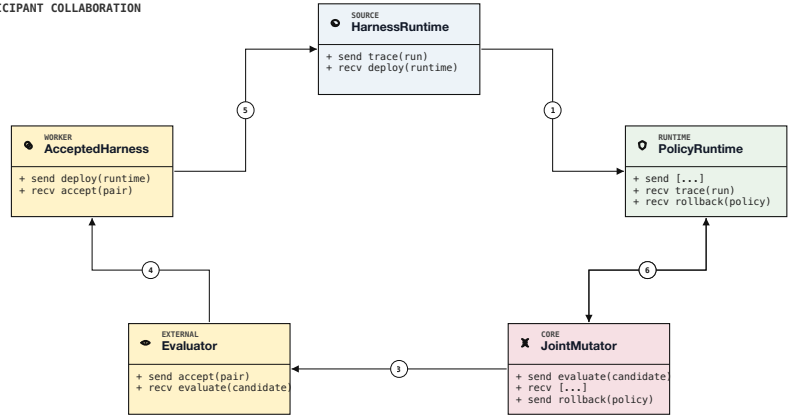
E06 Joint harness–policy evolution

Evolution · A² A3 · cycle role collaboration

Adapt runtime structure and policy together.

STRUCTURE · PARTICIPANT COLLABORATION



PATTERN INTERFACE

context
Runtime harness and model policy can both change.

trigger
An evolution round evaluates task behavior and proposes changes to either or both.

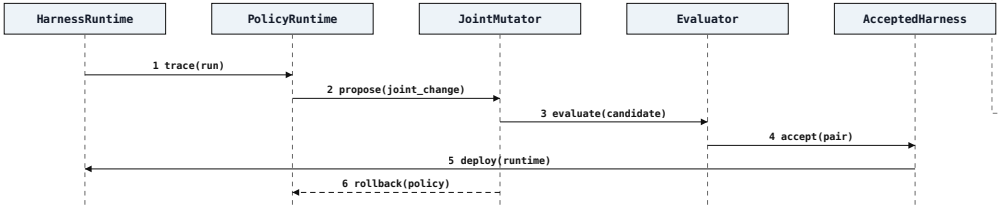
structure
Task interface, harness representation, policy representation, and joint evaluator.

effect
The selected pair is evaluated as a pair with attribution for harness and policy changes.

CONTRACT ANNOTATIONS

requires	Policy and harness variants are versioned jointly.
ensures	Results identify the evaluated pair and separate objective contributions where possible.
invariant	A policy gain is not reported as a harness gain without an ablation.
violation	Failed candidates or incompatible pairs are excluded with reason.

INTERACTION



MESSAGE TRACE 1 trace(run) → 2 propose(joint_change) → 3 evaluate(candidate) → 4 accept(pair) → 5 deploy(runtime) → 6 rollback(policy)

Evidence: 1/41 repositories, 1/36 families; 1 trajectories (1 multi-checkpoint); exact audit: 0 supported, 0 unresolved, 1 rejected.

Variation: Curated pairs, coevolution, alternating optimization, and ablation controls.

Negative control: Retraining only the model with a fixed harness is not joint evolution.