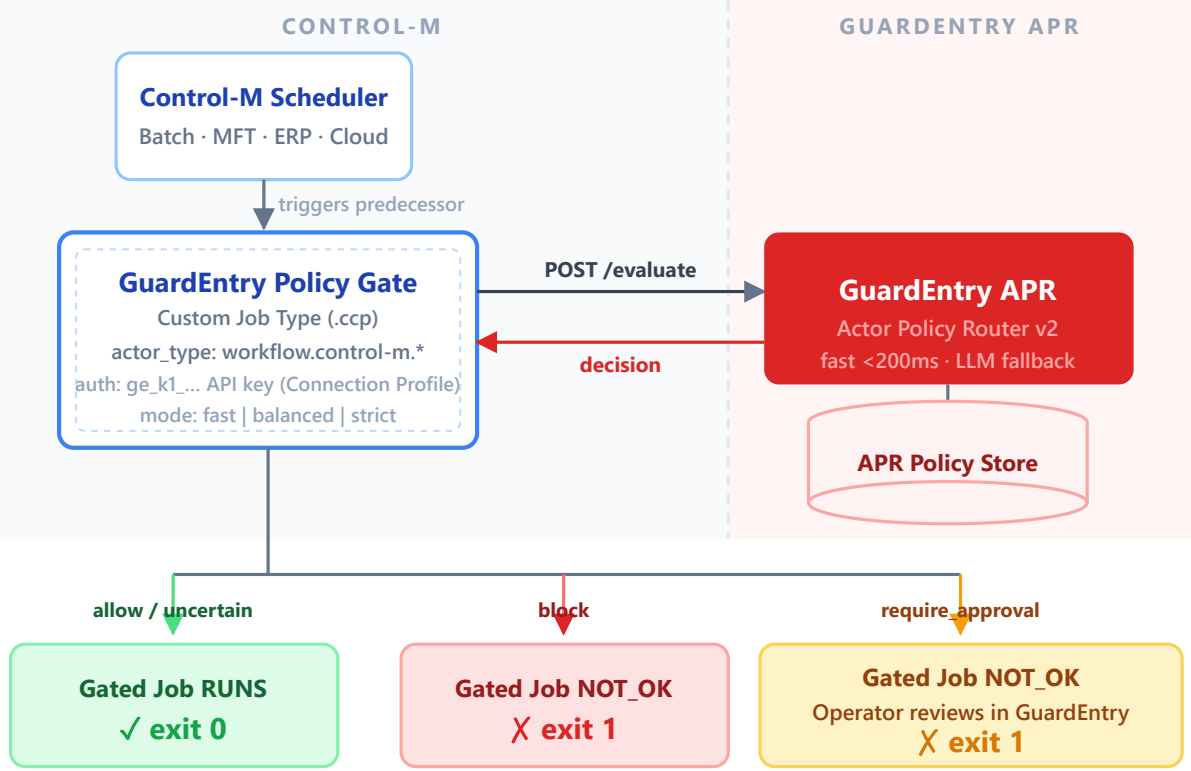
# GuardEntry × BMC Control-M

GuardEntry Policy Gate — Integration Architecture Overview

GuardEntry Policy Gate v1.0.0
Control-M/EM 9.0.19.100+ · BMC Helix Control-M
guardentry.ai · 2026-06-14

The **GuardEntry Policy Gate** is a custom Control-M Job Type that chains as a predecessor to any batch, file-transfer, ERP, or cloud-pipeline job. Before the gated job runs, Policy Gate calls GuardEntry's Actor Policy Router — a non-zero exit blocks the job. The same `.ccp` artifact works on self-hosted Control-M and BMC Helix Control-M (SaaS).




## HOW IT WORKS

1. **Control-M triggers the batch window.** Policy Gate runs as a *predecessor* — its exit code gates whether the downstream job runs. No polling, no callbacks; standard Control-M flow control.
2. **Policy Gate calls GuardEntry APR.** It sends `POST /api/v2/policy-router/evaluate` with the job name, node, run date, and a configurable `content` payload. Auth uses a scoped API key ( `ge_k1_…` ) stored in a Control-M Connection Profile.
3. **APR evaluates against policies.** `fast` mode applies regex/substring rules in <200 ms. `balanced` / `strict` add LLM-assisted evaluation — useful for file-exfiltration patterns, change-window violations, and SOC 2/ISO 27001 control checks.
4. **Policy Gate acts on the decision.** `allow` → exit 0 (downstream runs). `block` / `require_approval` → exit 1 (NOT_OK). Decision + audit link written to sysout and exposed as `%%GUARDENTRY_DECISION` / `%%GUARDENTRY_AUDIT_LINK` application variables.

## DECISION OUTCOMES

| DECISION | EXIT | DOWNSTREAM JOB |
|---|---|---|
| allow | 0 | Runs normally |
| block | 1 | NOT_OK — skipped; set `on_block=warn` for observe-mode pilots |
| require_approval | 1 | NOT_OK — operator reviews in GuardEntry, can re-order after approval |
| uncertain / verify | 0 | Runs; decision logged for review |
| unreachable | 0 | Runs fail-open — APR outage won't take down the batch window |

## KEY JOB PARAMETERS

| INPUT | DEFAULT | PURPOSE |
|---|---|---|
| `actor_type` | `workflow.control-m` | Policy lookup key — use distinct subclasses per job class (e.g. `workflow.control-m.file-transfer` ) |
| `content` | `%%JOBNAME on %%NODEID at %%ODATE` | Payload evaluated by APR; enrich with file paths, SQL, or SAP transaction codes for richer decisions |

| INPUT | DEFAULT | PURPOSE |
|---|---|---|
| `mode` | `fast` | `fast` <200 ms · `balanced` · `strict` (adds LLM) |
| `on_block` | `fail` | `fail` = exit 1 · `warn` = exit 0 (observe mode) |
| `correlation_id` | `%%ORDERID` | Trace ID propagated to GuardEntry audit for cross-system correlation |