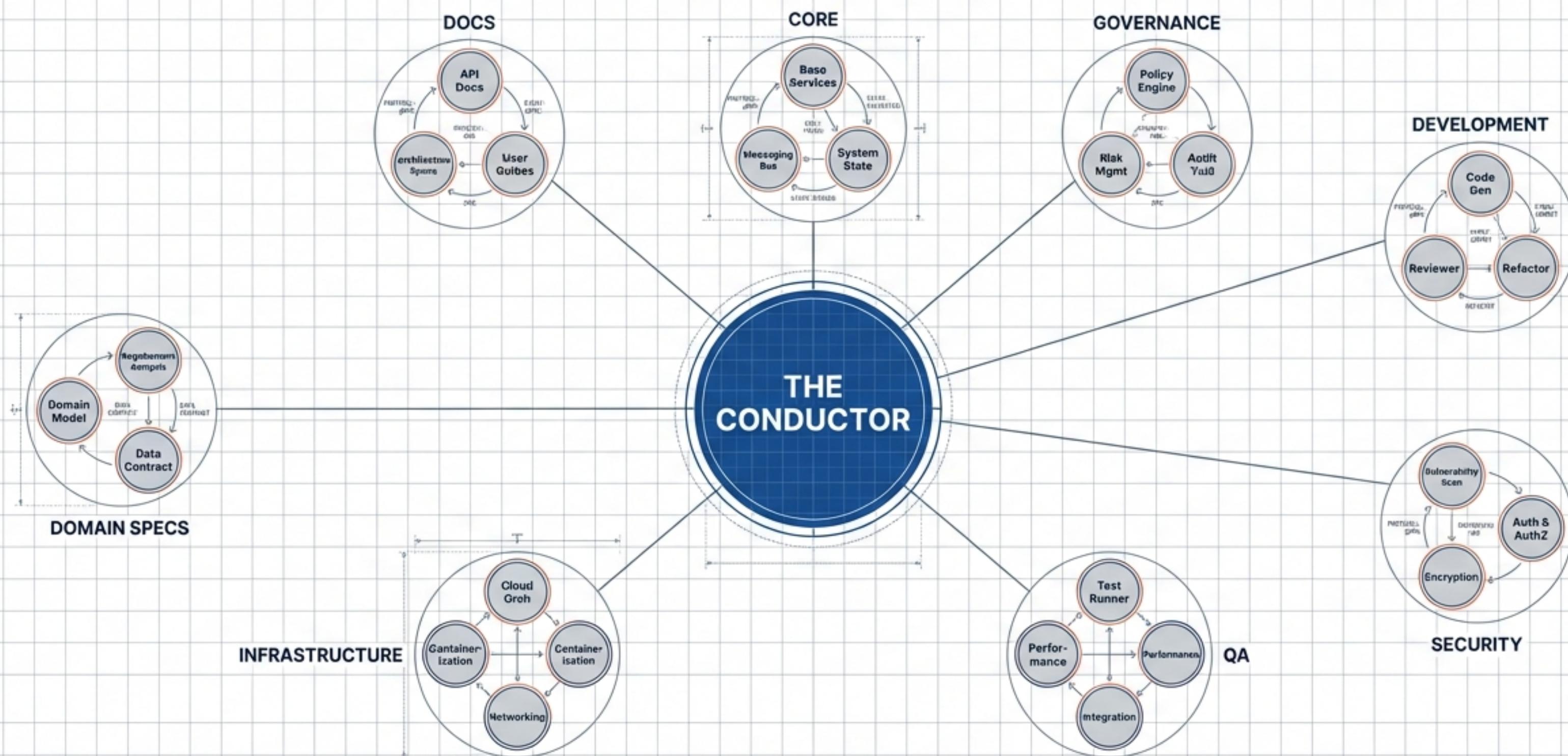


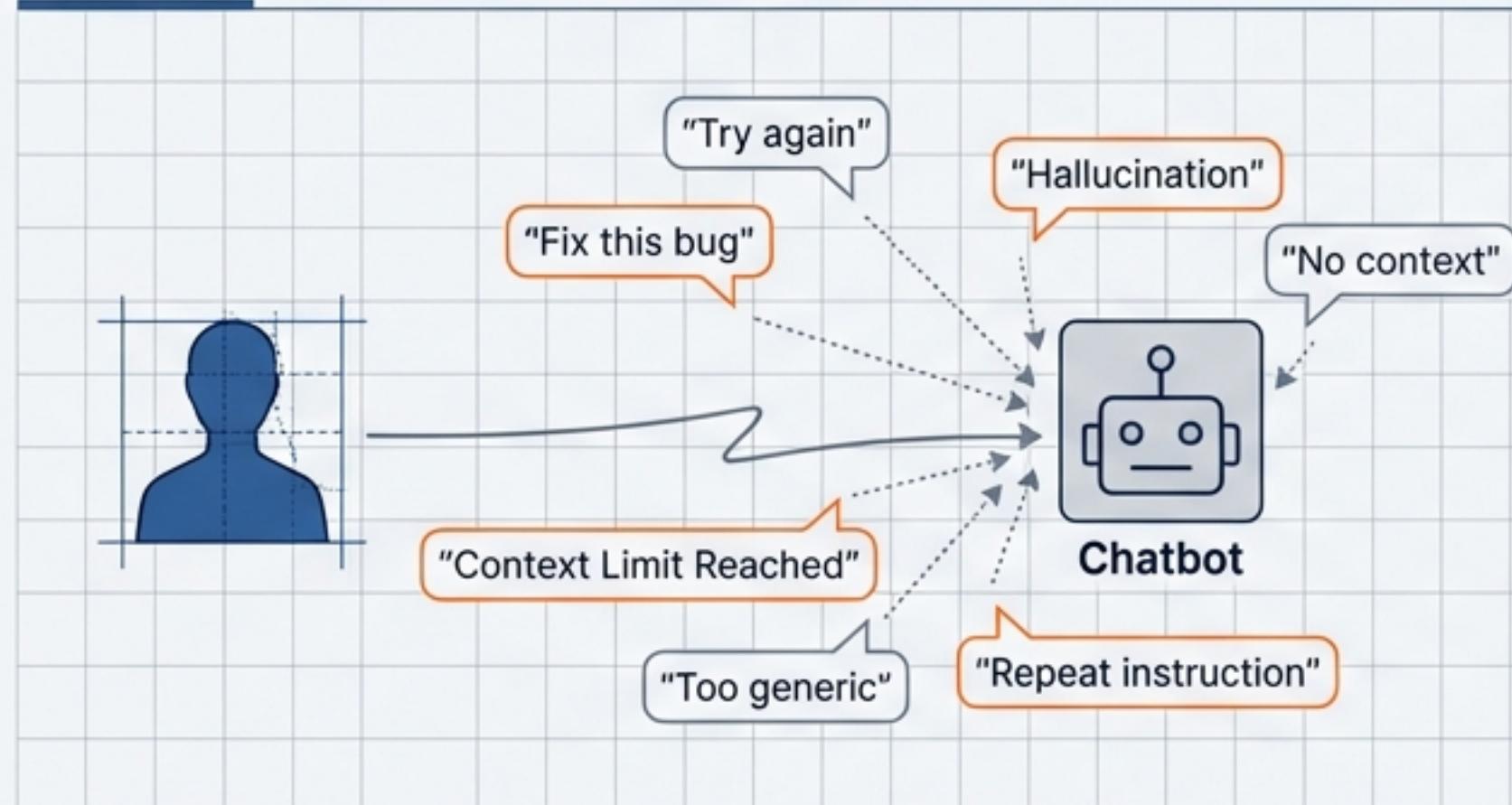
# Claude Code Orchestration Agent System

A Multi-Agent Architecture for the 2026 Software Development Lifecycle



# Moving from Ad-Hoc Prompting to Disciplined Orchestration

## LEGACY: AD-HOC PROMPTING



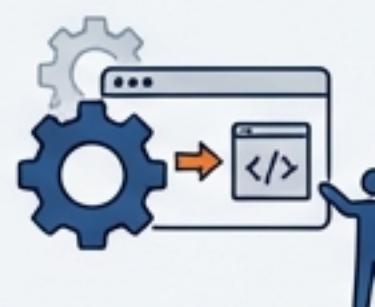
### SCALE

55+ Specialized Agents working in coordination



### AUTONOMY

Production-ready software with minimal human intervention

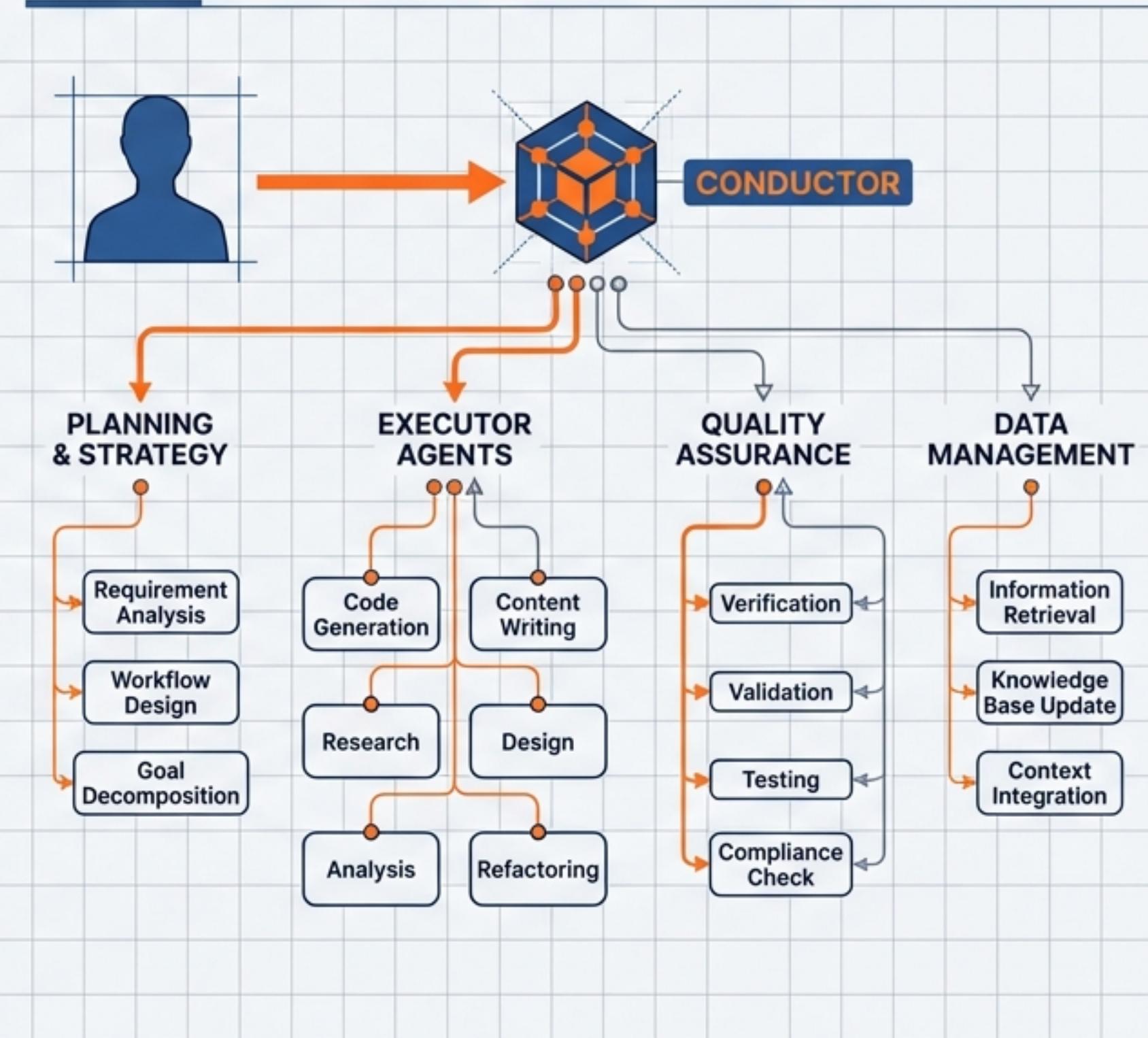


### PHILOSOPHY

Prioritizes "Discipline" and "Rigor" over raw generation speed

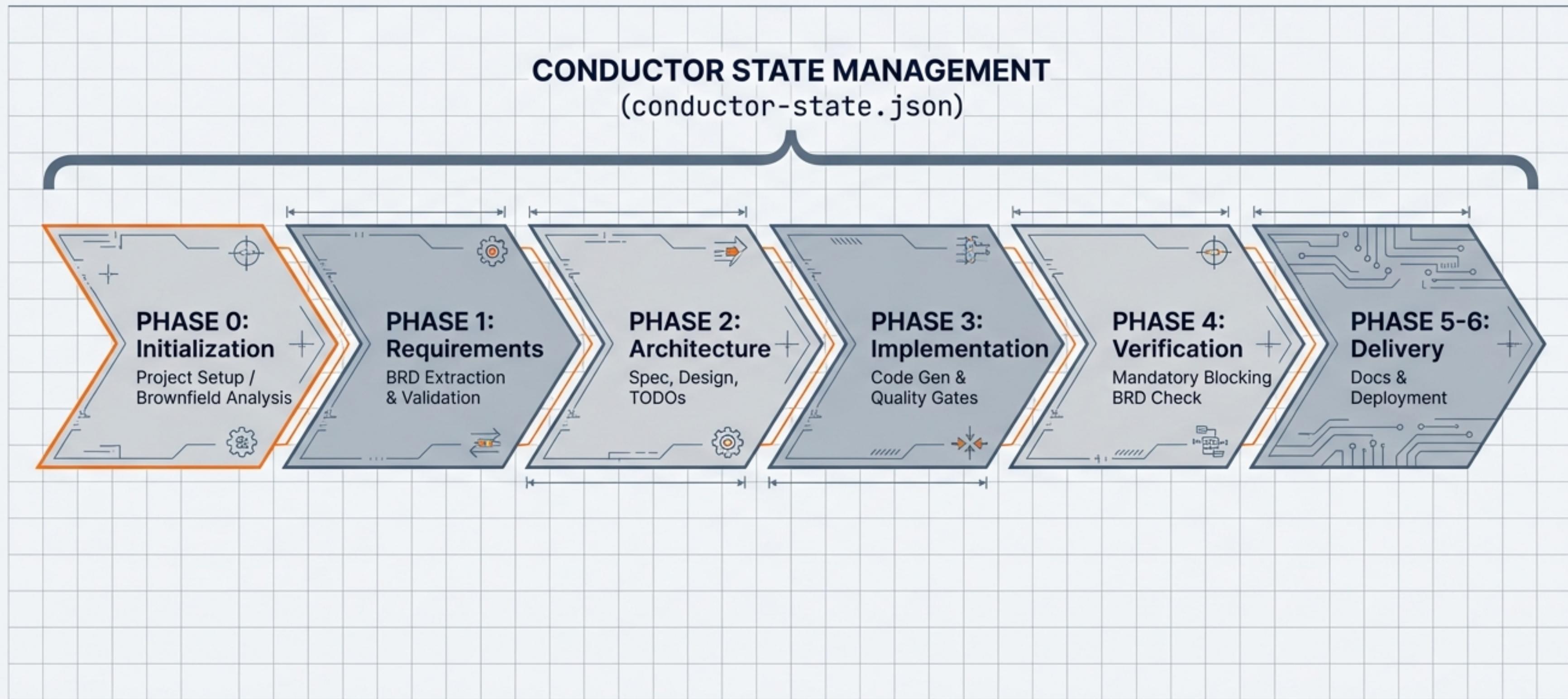


## FUTURE: ORCHESTRATED WORKFLOW

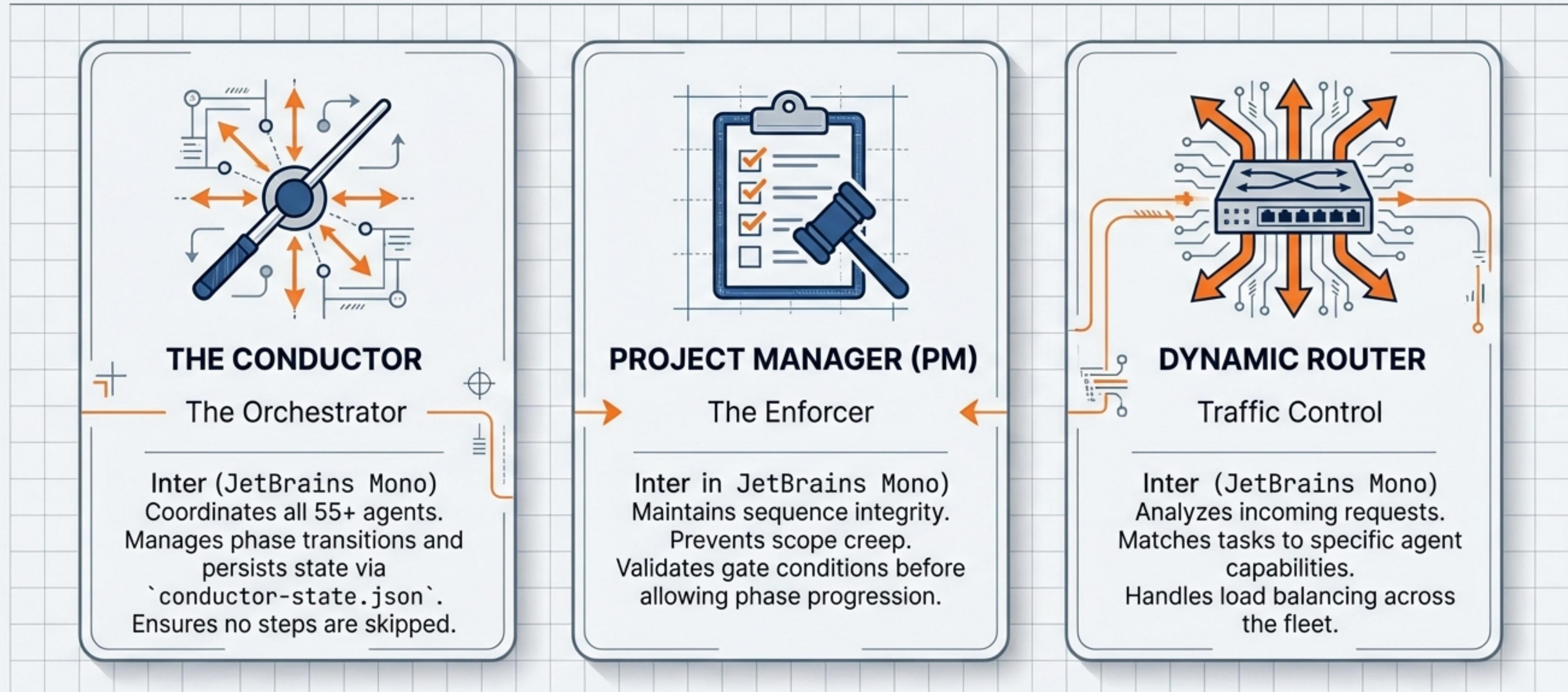


# The 6-Phase Orchestration Model

A linear, gated lifecycle managed by the Conductor Agent.

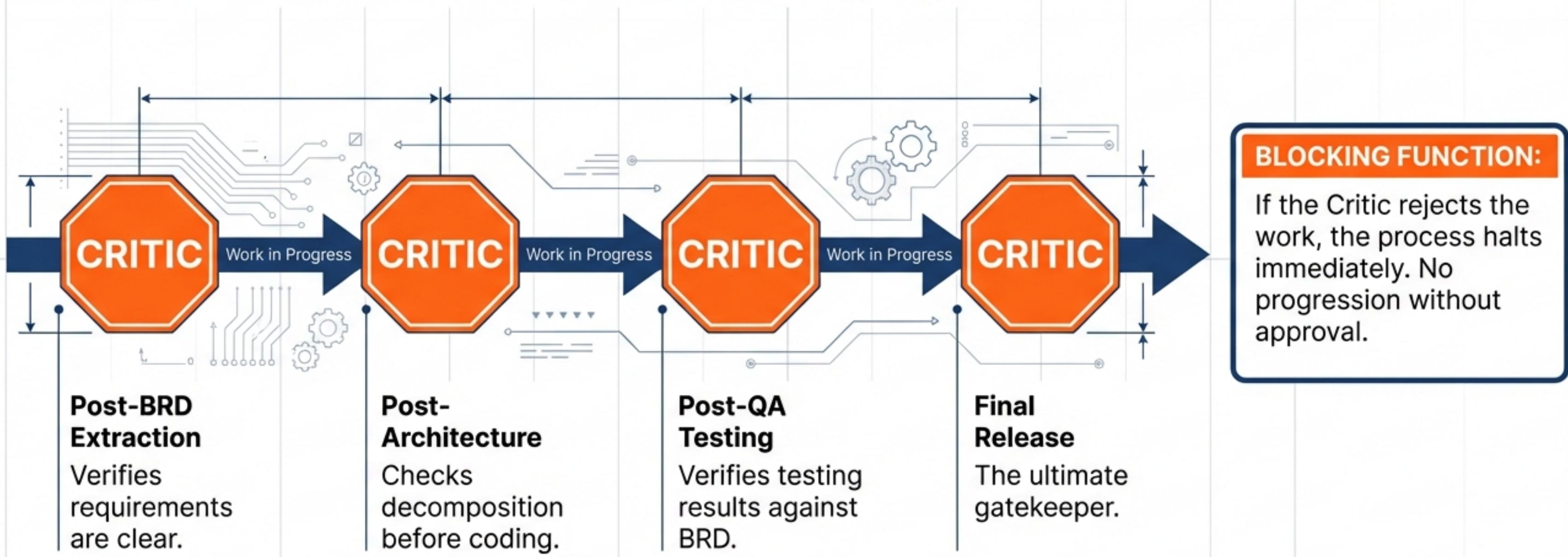


# Governance and Workflow Control

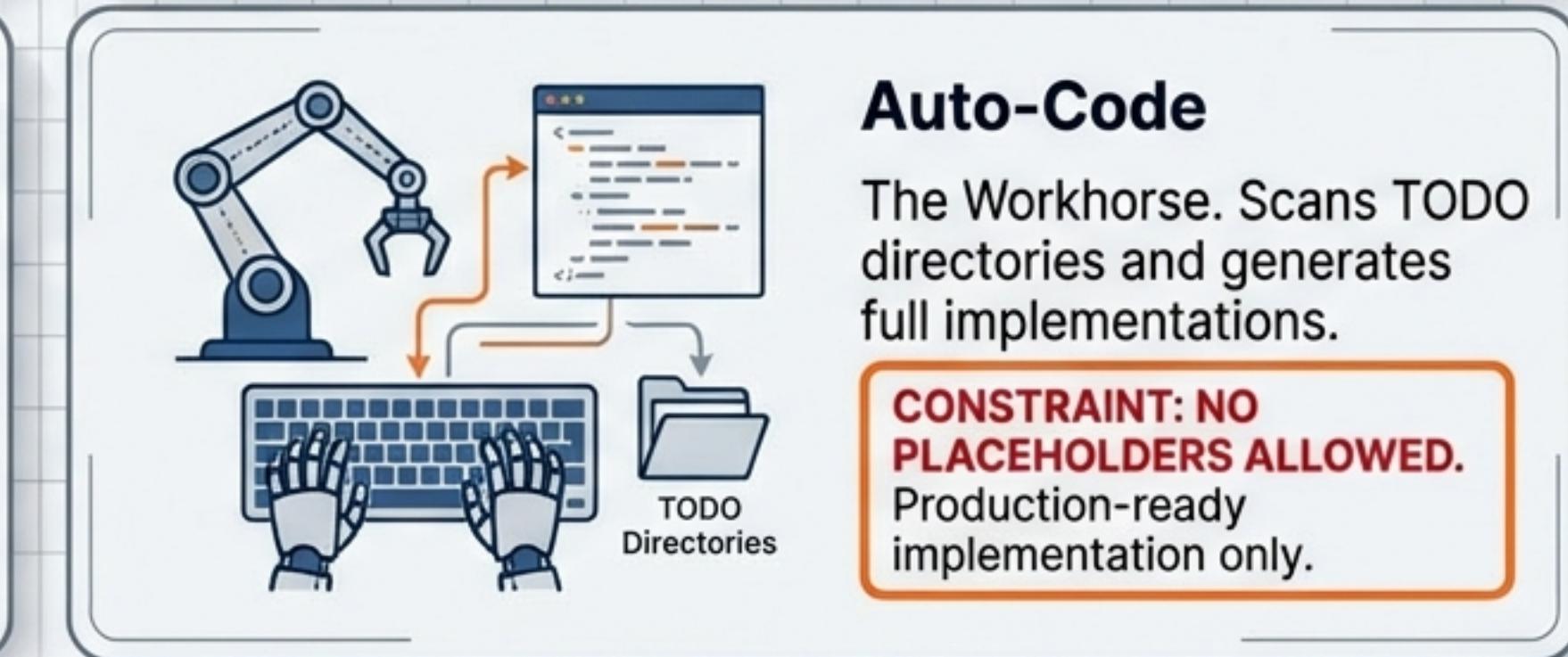
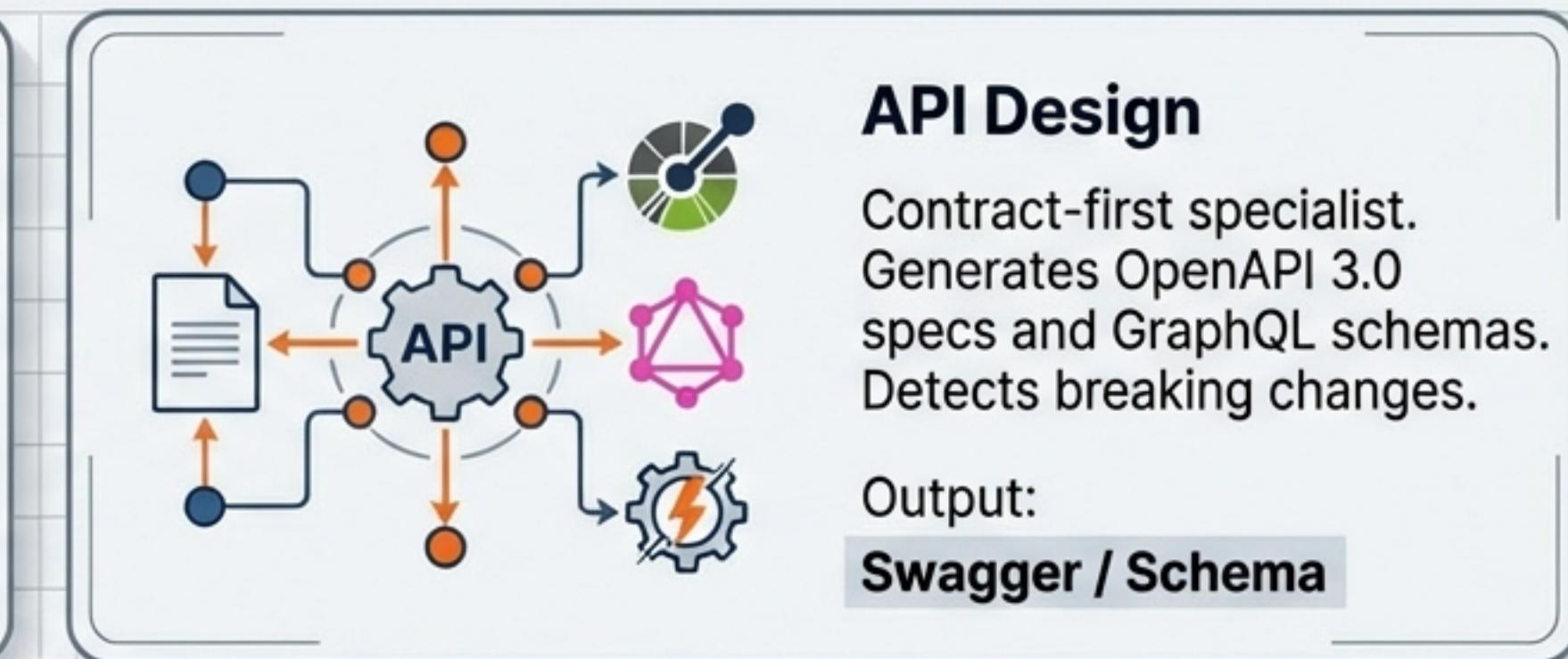
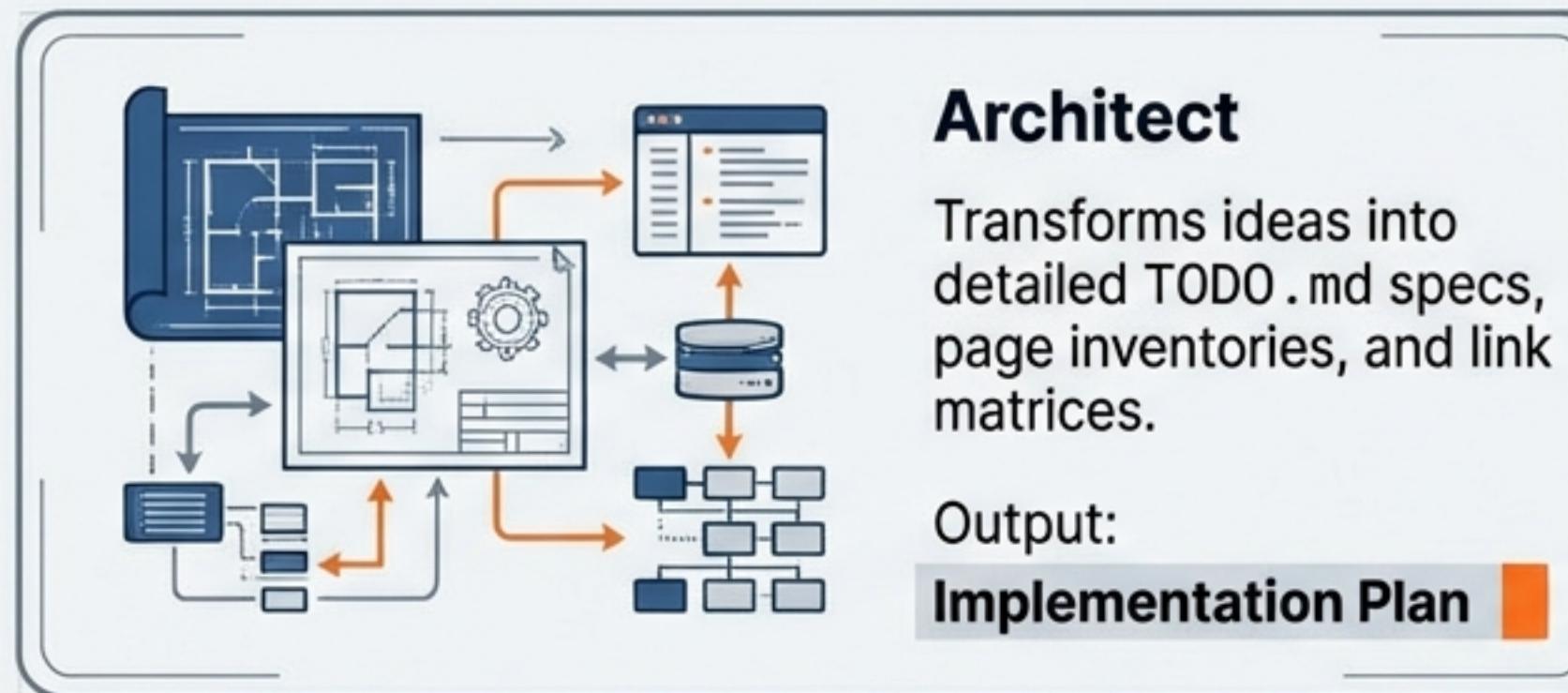


# The Critic: Trust Nothing, Verify Everything

*Mandatory validation checkpoints at critical phases.*



# The Builder Squad: Turning Specs into Production Code



# The Office of the CISO: Security as a Gate

## The CISO Agent

- Ensures OWASP Top 10 compliance.
- Performs threat modeling (STRIDE).

## The Security Gate

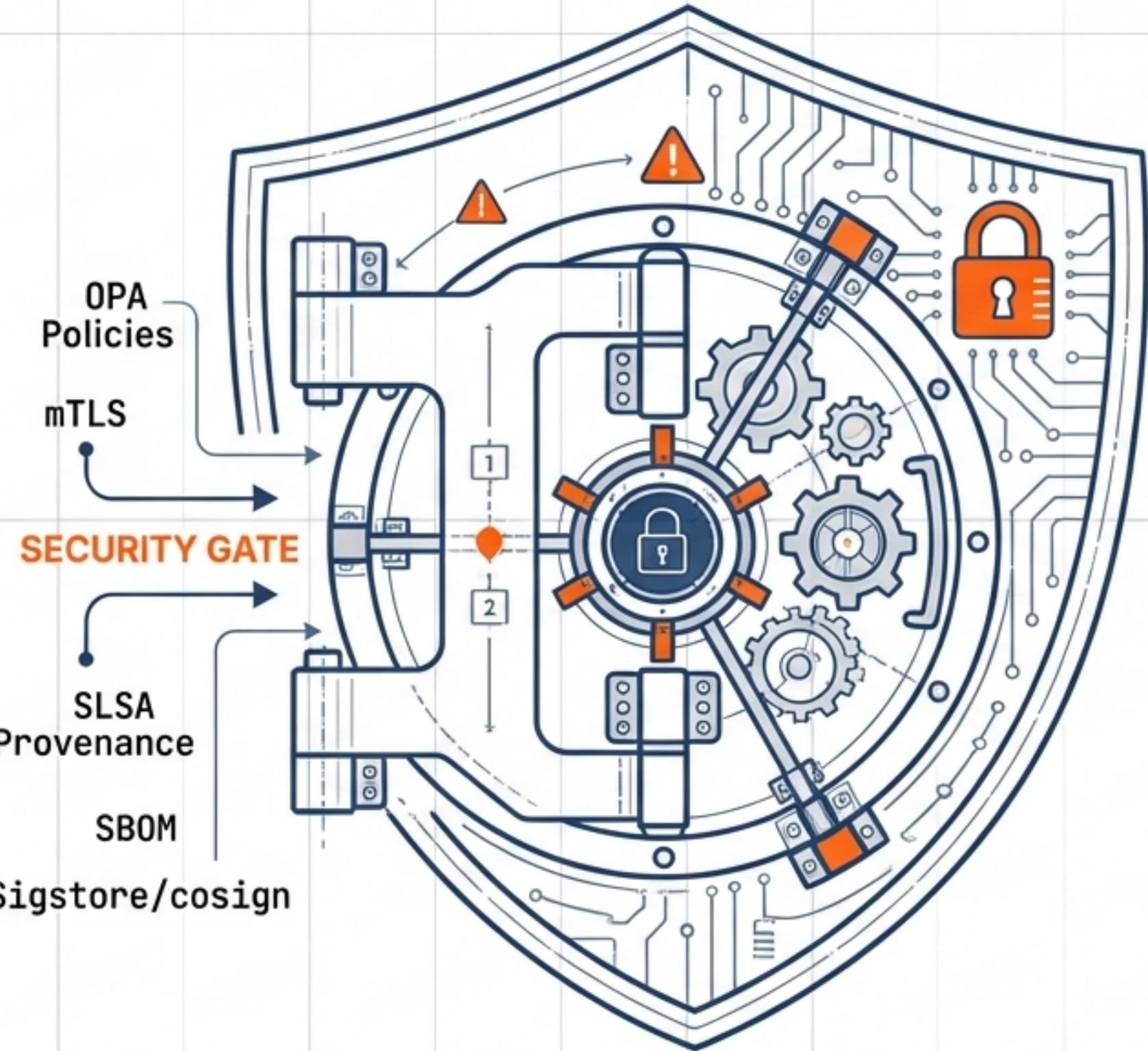
- Mandatory Checkpoint.
- All agent spawning routes through this gate.
- Enforces OPA policies and mTLS identity verification.

## Supply Chain Security

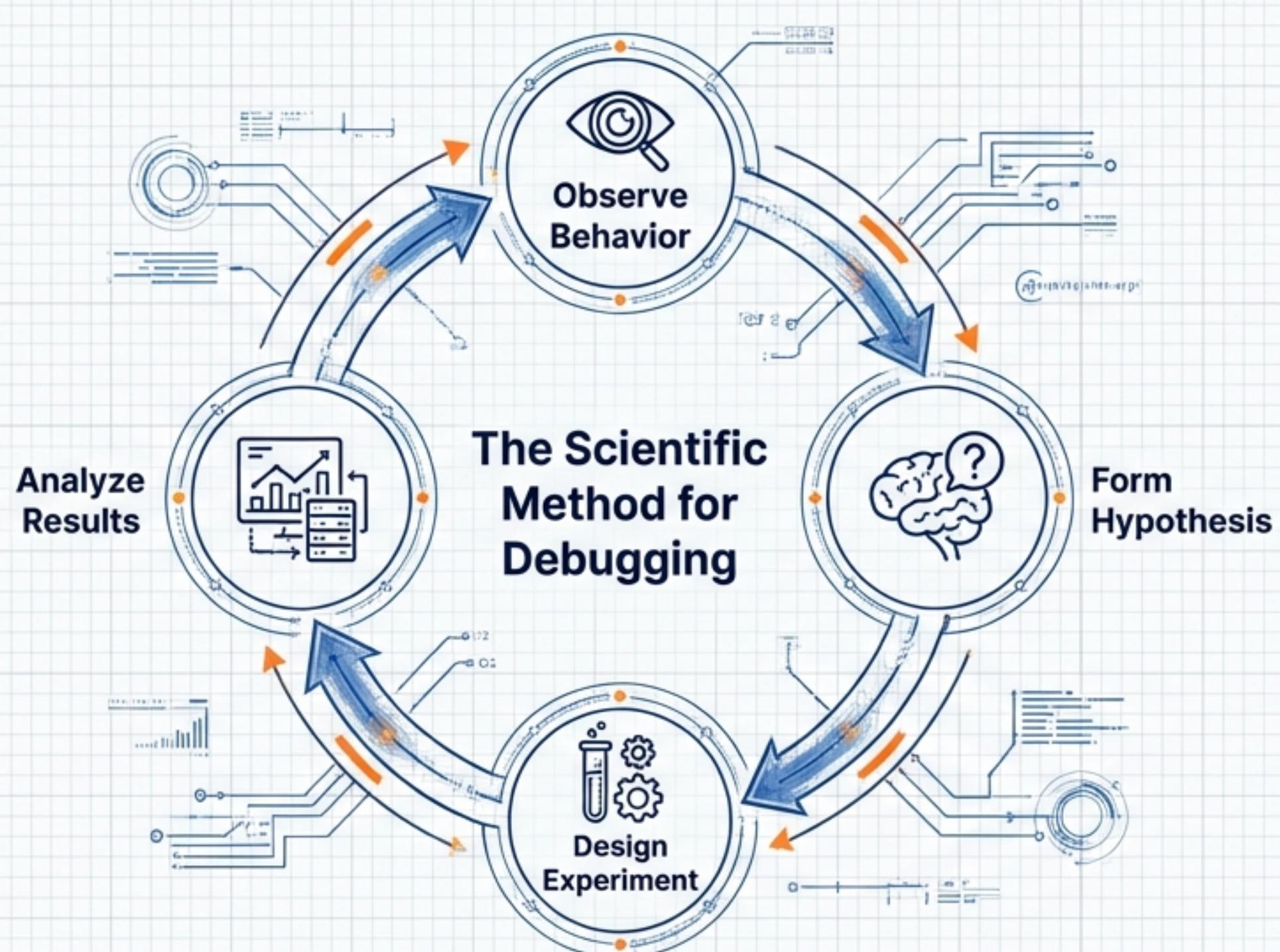
- Manages SLSA provenance attestations, SBOMs, and Sigstore/cosign artifact signing.

## Pentest Coordinator

- Orchestrates attack scenarios. Mandatory for production release.



# Scientific Quality Assurance and Analysis



## Agent Roles

### QA Agent:

Creates test plans. Performs Gap Analysis between BRD and Output.

### Bug Find Agent:

Executes the scientific loop to solve persistent errors.

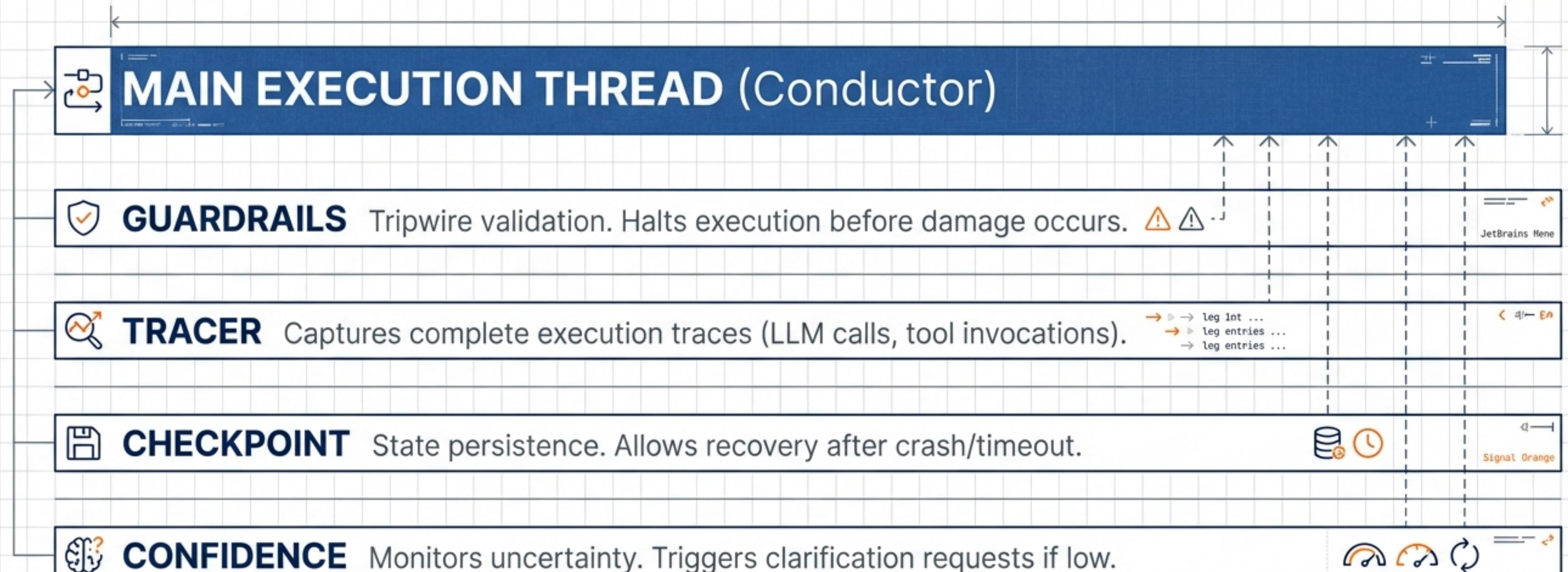
### Root Cause Agent:

Investigates failures using "5 Whys" and Fishbone analysis.

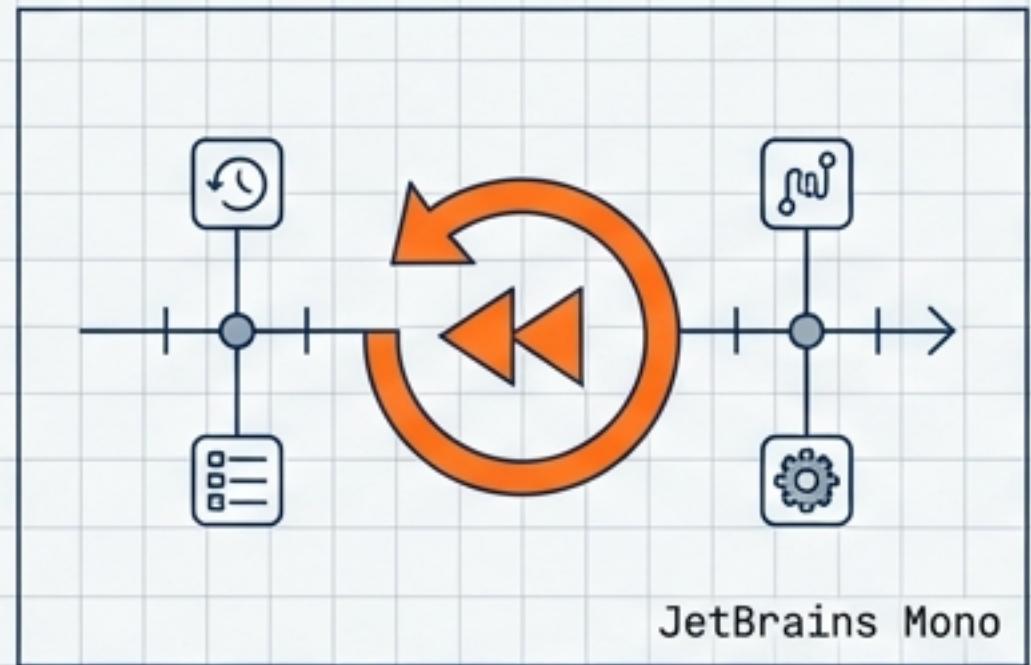
### Code Reviewer:

Analyzes architecture/performance. Pre-merge requirement.

# Parallel Intelligence and Observability

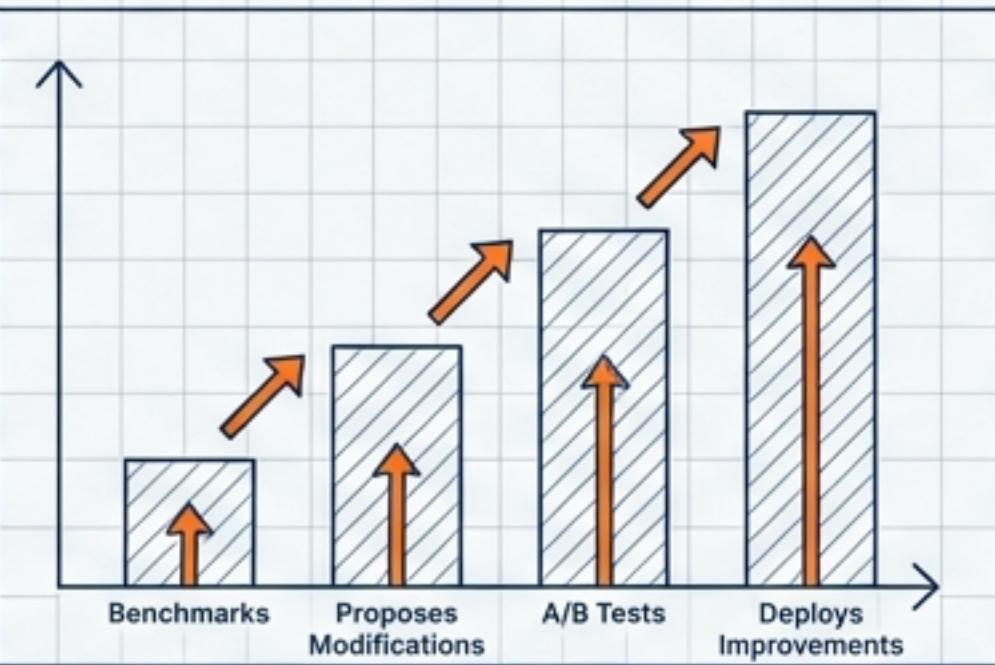


# Advanced Capabilities and Self-Evolution



## Time-Travel

Jumps back to previous checkpoints. Modifies state to replay execution paths for debugging.



## Self-Improve (SICA)

Benchmarks agent performance. Proposes modifications. A/B tests changes. Deploys improvements autonomously.



## The Planner

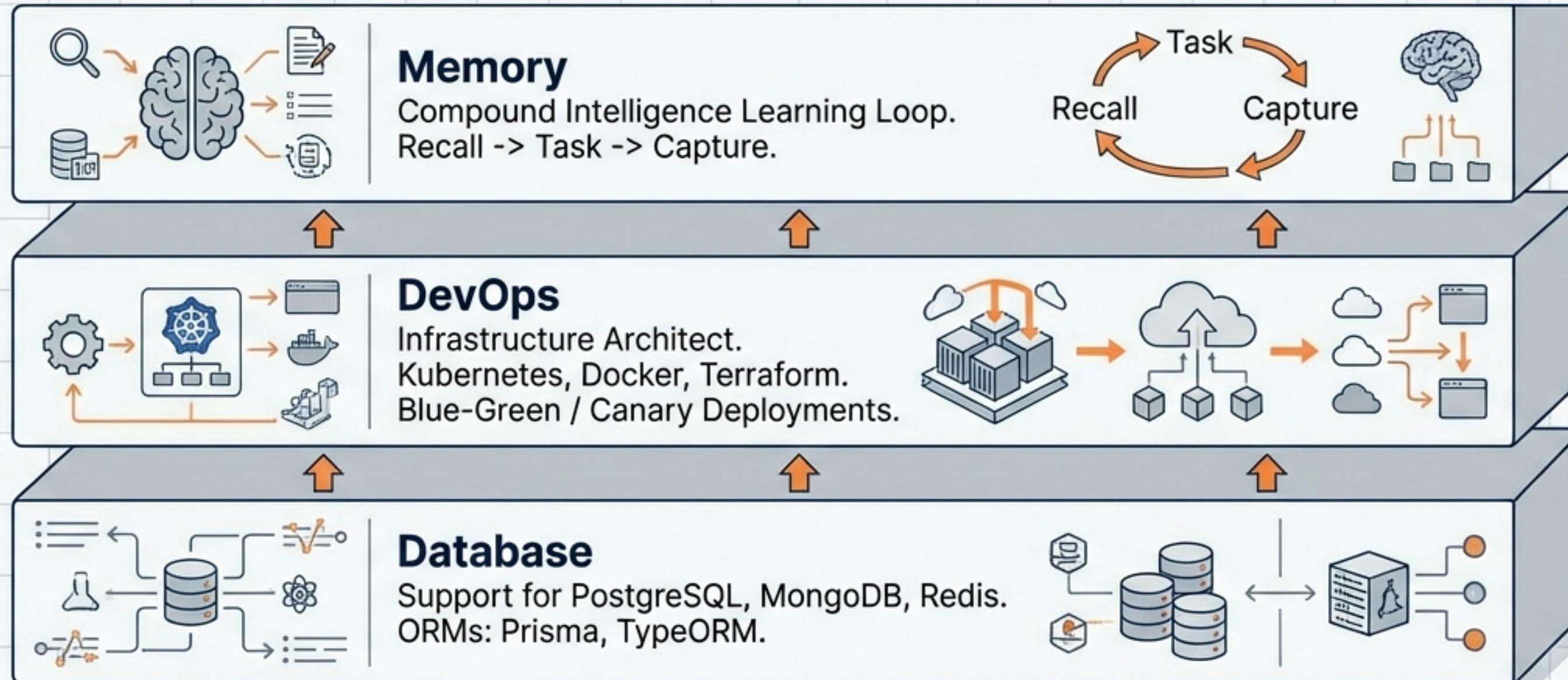
Interactive specialist (Devin 2.0 style). Collaborates with users to build step-by-step plans with confidence scoring.

# Documentation, Compliance, and The 'Paper Trail'

- **PRD Manager:** Maintains 'Living PRD' repository with semantic indexing and version tracking.
- **Doc Generator:** Automatically creates READMEs, Setup Guides, and SDLC compliance evidence.
- **Compliance Agent:** Enforces Policy-as-Code for SOC 2, GDPR, HIPAA, ISO 27001. Automates audit trails.



# Infrastructure and System Integration



**“Built on standard, robust enterprise foundations.”**

# The Mandatory Gatekeeper Dashboard



Post-BRD Extraction (Status: **BLOCKING**) - Checked by Critic



Post-Architecture (Status: **BLOCKING**) - Checked by Critic



Security Review (Status: **BLOCKING**) - Checked by CISO



Post-QA Testing (Status: **BLOCKING**) - Checked by Critic



Pre-Release (Status: **BLOCKING**) - Checked by Security Gate



Production Deploy (Status: **BLOCKING**) - Checked by Pentest Coordinator

# The Future of Software Factories

The Orchestration Agent System represents the maturation of AI development. We have moved beyond experimental assistants to a robust, enterprise-grade software factory.



**Production-ready software, delivered  
by a disciplined digital workforce.**