

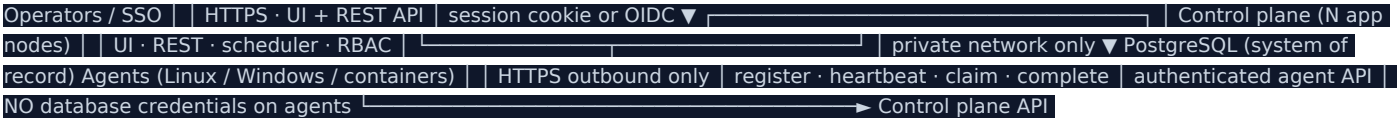
Just Run It · Deployment Architecture

One-page reference · API-only agents · Customer-hosted control plane

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How production deployments are structured

Operators and agents talk to the control plane over HTTPS APIs. Only application nodes connect to PostgreSQL.



Security takeaway: Agents never open a direct connection to PostgreSQL. Work is claimed and results reported through the secured control-plane API — the same model security teams expect from modern distributed systems.

1. COMPONENTS

Control plane

Stateless app nodes (scale horizontally). Serves UI and REST, schedules cron triggers, enforces RBAC and workspaces.

PostgreSQL

System of record for definitions, executions, users, and agent registration. Reachable only from app nodes.

Agents

Out-of-process workers on customer hosts. Pull work, run COMMAND/HTTP/GIT_RELEASE jobs next to local files, report status.

2. SUPPORTED DEPLOYMENT FOOTPRINTS

Model	Typical use	Notes
Docker Compose	Production starter / HA lab	PostgreSQL + dual app nodes + agents (reference stack)
Kubernetes / Helm	Cluster production	Server HA, agents, optional in-cluster Postgres
Bare metal / VM	Traditional estates	Java 21 runtime; agent JAR on any JVM host
Local JAR	Sandbox / demo only	Embedded H2; not a production pattern

3. RUNTIME MODES

Agent mode (recommended for production)

- Workers claim queued jobs from the API
- Scripts and binaries stay on agent hosts
- Preferred agent pins work to a named host

Local mode (lab / single node)

- Control plane executes jobs in-process
- Useful for evaluation without remote agents
- Not the default production federation pattern

4. NETWORK & OPERATIONS NOTES

Network

- Users → HTTPS to control plane (LB / reverse proxy)
- Agents → outbound HTTPS to control plane only
- App nodes → private TCP to PostgreSQL
- Optional: restrict UI to VPN / allowlisted nets

Operations

- Health, readiness, and metrics on the app tier
- Separate prod vs pre-prod control planes when policy requires
- Co-locate agents with the application estate they serve
- Back up PostgreSQL as the durability boundary