



LOCAL MULTI-MODEL AI

Multiple Local LLMs, One Governed Workflow

Use the model best suited to the task, keep sensitive industrial context on-prem, and verify critical conclusions independently.

ASSET + OPERATIONS + MAINTENANCE + KNOWLEDGE + AI

PHOENIX turns industrial data and engineering experience into a coordinated intelligence environment that helps teams protect reliable capacity and improve decisions.

Multiple Local LLMs, One Governed Workflow

No single language model is best at every industrial task. Coding, long-form reasoning, document extraction, classification and vision can each favor different models and different resource profiles.

Organizations also need control over where sensitive context is processed, how credentials are handled, what tools an agent may call and how a high-impact answer is checked before it becomes a recommendation.

The PHOENIX approach

LabSource provides a local AI execution environment in which AgentSWARMS can select an appropriate model, attach approved context, call governed tools and hand critical conclusions to a second model or review agent. Local inference reduces dependence on external per-token services while allowing approved cloud calls when policy permits.

WHY THIS MATTERS

Industrial AI delivers the most value when it can combine machine condition, operating state, maintenance readiness, production demand and expert knowledge without losing governance. The differentiator is not simply access to an LLM; it is the context, tool control, verification and organizational memory surrounding the model.

A governed context-to-decision loop

1	Classify the task
2	Select model by capability and cost profile
3	Attach minimum necessary context
4	Execute approved tools through CIP
5	Generate result
6	Cross-check high-impact conclusions with a second model
7	Store evidence and verification outcome

What PHOENIX adds

CAPABILITY	VALUE
Model routing	Choose coding, reasoning, vision or lightweight models based on the task.
Cross-model verification	Use independent review rather than treating the first answer as authoritative.
Local inference	Keep selected workloads and proprietary context inside customer infrastructure.
Governed tools	Separate model reasoning from credentials, database permissions and system access.

Where this becomes useful

- Engineering analysis
- Internal coding
- Document review
- Automated reporting
- Data classification
- Reliability diagnostics

A practical operating model

PHOENIX is designed to support human decision-making rather than bypass it. Agents can gather evidence, explain patterns, draft code, prepare reports and propose actions. High-impact actions can remain subject to explicit human approval and the permissions enforced by CIP.

Suggested deployment sequence

1. Connect	Start with approved read-only or narrowly scoped internal data sources and existing PHOENIX sensor context.
2. Contextualize	Map facilities, assets, components, users, production relationships and domain vocabulary.
3. Prove	Choose a small number of high-value workflows with clear evidence and measurable outcomes.
4. Capture	Retain expert corrections, verification results and operational outcomes in the contextual knowledge layer.
5. Scale	Reuse the same governed tools, models and knowledge across reports, agents and internal applications.

Business outcome

The AI strategy is not tied to one model vendor. The orchestration, context, governance and learning remain part of the customer-controlled PHOENIX environment.

Keep intelligence useful, bounded and auditable

Minimum necessary context	Retrieve only the data required for the task rather than exposing entire systems by default.
Separated credentials	Models and prompts should not become the long-term store for passwords, tokens or system secrets.
Human approval	Keep appropriate approval gates around changes that affect production systems, maintenance commitments or releases.
Evidence traceability	Preserve source data, tool calls and verification details behind important recommendations.
Local knowledge ownership	Keep approved domain knowledge and contextual history under customer control.
Model independence	Treat models as replaceable reasoning engines while preserving tools, knowledge, workflows and evaluations.

PHOENIX architecture in one sentence

Sense what is happening, securely connect the surrounding plant context through CIP, use LabSource and AgentSWARMS to select and verify the right local intelligence, then retain the evidence and expert outcome so the organization becomes smarter over time.

About PHOENIX

PHOENIX combines industrial sensing, edge connectivity, secure contextual data access, local AI orchestration, reporting and application development to help industrial teams protect reliable capacity and improve the quality of engineering and operational decisions.

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