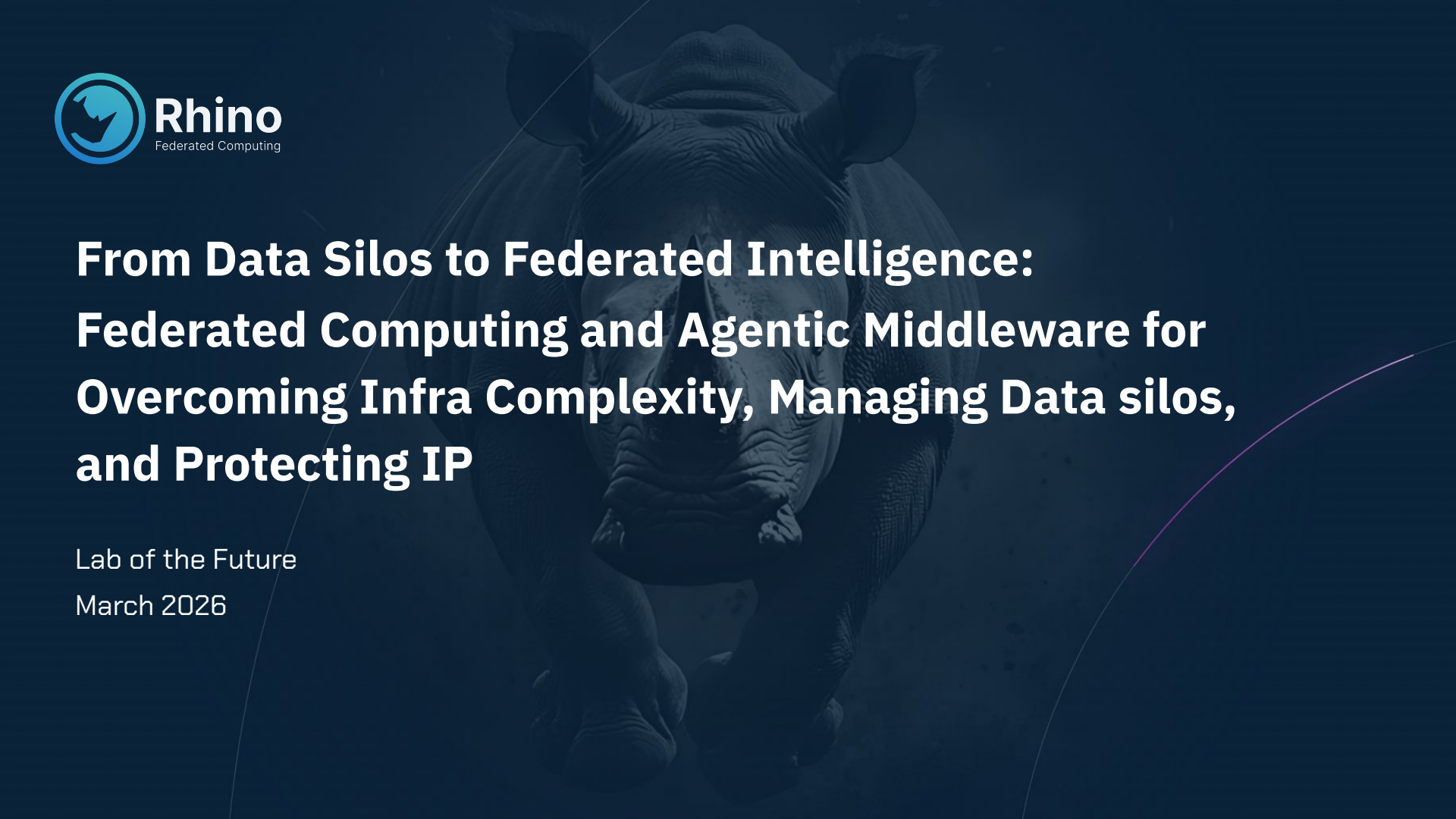
Rhino
Federated Computing

From Data Silos to Federated Intelligence: Federated Computing and Agentic Middleware for Overcoming Infra Complexity, Managing Data silos, and Protecting IP



Lab of the Future

March 2026

A typical AI and Agent stack fails on distributed & complex orchestration environments.

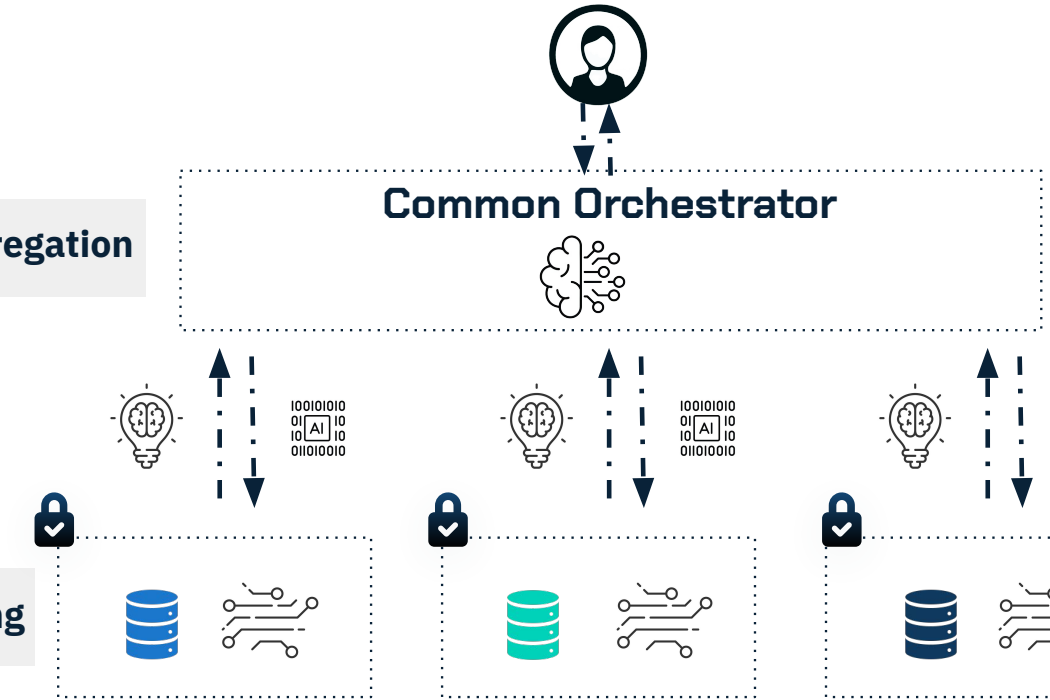
Assumptions:

- You have centralized access to your data.
- You control the full compute environment.
- Compliance and governance are someone else's problem.

Reality:

- Data is distributed across institutions, behind firewalls and not accessible to agents.
- Privacy regulations prohibit centralized pooling.
- Need for auditability and access controls.
- Need guardrails on model behavior at the distributed sites.
- Need mechanism to evaluate agent performance across federated sites.

The Federated Computing Process



2 Global Aggregation

1 Local Training

3 Local Deployment

Proven at Enterprise Pharma Scale: Real Data, Real Partners, Complex Security & Governance Requirements

Lilly TuneLab: Federated AI Infrastructure in Production

- ➔ Federated learning across multiple biotech and ELN partners - data never leaves partner environments
- ➔ Integrated data contribution → validation → training → inference pipeline
- ➔ Lilly Model Ops + Secrets Manager integration for enterprise security
- ➔ Model registry with automatic version sync across all partners

Impact

- ➔ 24-48 hr onboarding of new partners
- ➔ 24/7 operations
- ➔ A flywheel of data → FL → inference → value

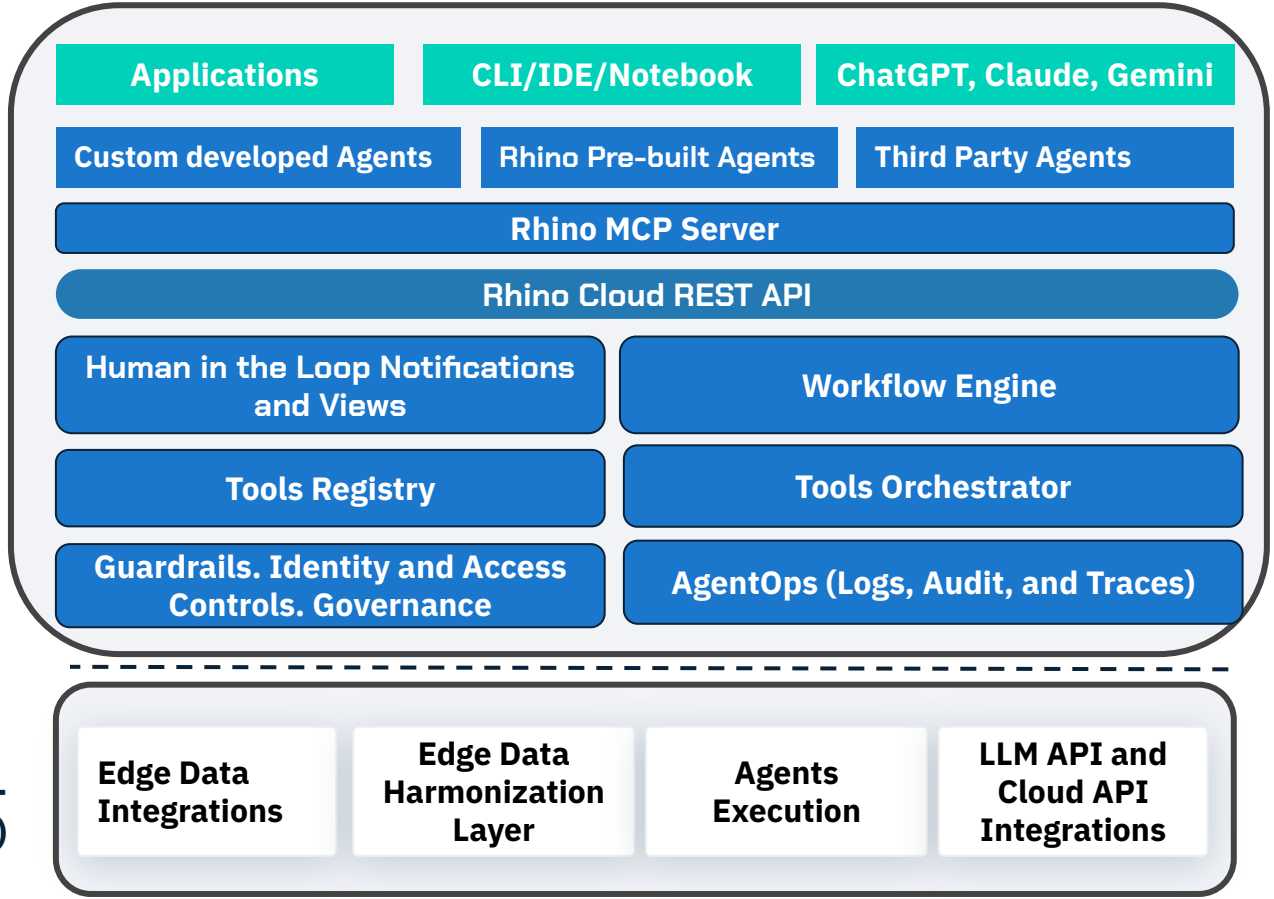
Federated Computing is the control plane and MCP server for safe and governed agent workflows.

Agent Control Plane (Orchestrator)

Standardized Integration: Route agents to data sites using the Rhino MCP Server.

Trust & Safety: Maintain oversight - audit trails and human-in-the-loop (HITL)

Validated Execution: Access a registry of tools for executing tasks



Agent Execution - Data Plane(s)

Illustrative Real World Multi-Agent Collaboration: Automated, governed & privacy-preserving, from feasibility to insights

Federated Network Established

Project Setup on Rhino FCP

Data Providers Ingest Data to Rhino

All data remains on edge client

Feasibility Agent

Find fit-for-purpose sources

Data Quality Agent

Runs standardized quality checks & escalates “critical” issues before analysis.

Insights Agent

Translates analysis needs into federated analytics code, executes at sites & aggregates results.

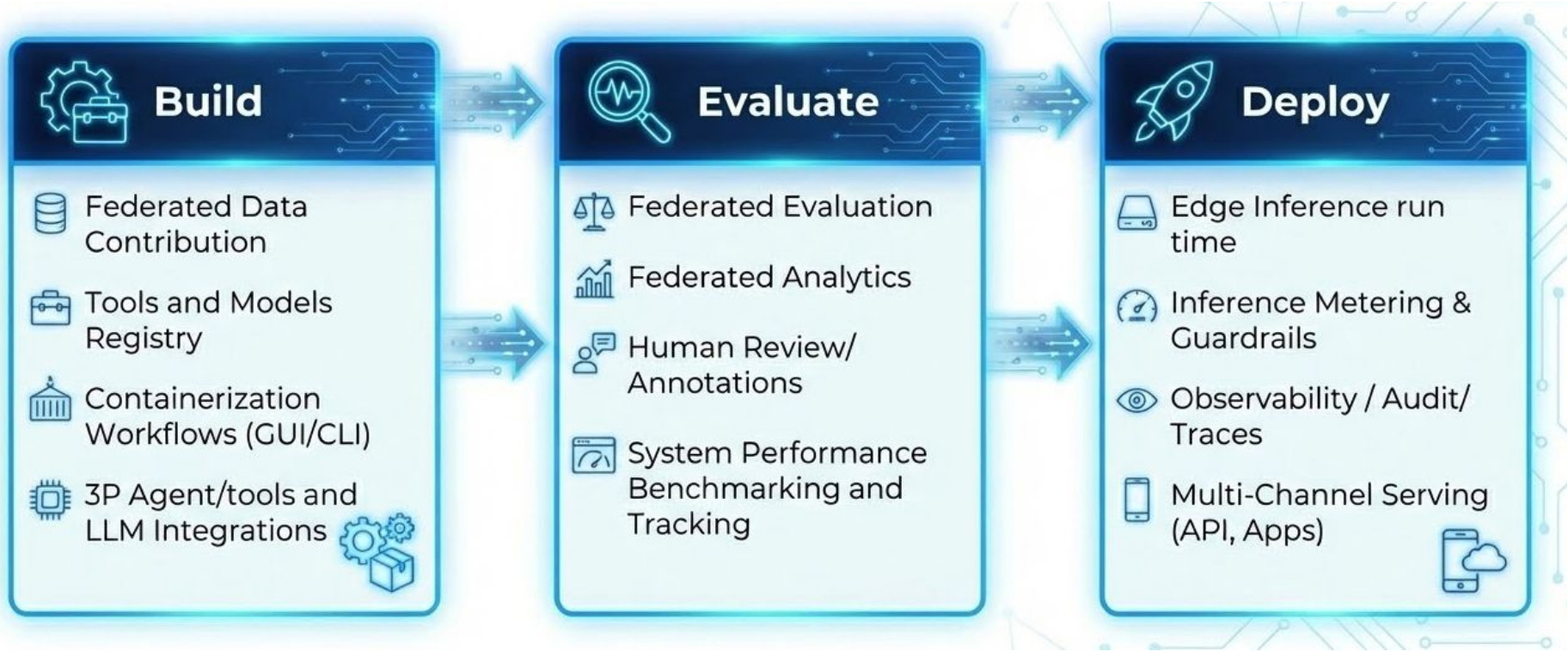
Cohort Building Agent

Translates protocols into computable cohort definitions, runs cohort diagnostics & validation across sites iteratively, & presents recommendations.

Data Harmonization Agent

Proposes schema & vocabulary mapping, triggers human in the loop review, & generates ETL specs/ transformations.

The Rhino Federated Computing Platform (FCP) is uniquely positioned to execute a best-in-class federated agent workflow



Rhino FCP integrates seamlessly with offerings from tech leaders to create an enterprise data collaboration stack

Flexible Rhino Client Installation Options

Dozens of Data Source Integrations

Rhino Federated Computing

- Data Preprocessing and Harmonization
- Privacy Preserving Federated Analytics
- Data and Model Catalog
- Model Training and Inference
- FL Orchestration
- TREs and Federated Computing Applications

User Permissions, Privacy and IP Protection config, Audit Logs, Data/Code/Model versioning

Any Programming Language

Any Model or ML Library

Any Application, Data Viz, or Custom Code