

SOLUTION BRIEF

EDB Postgres[®] AI Hybrid Manager

Unify control, reduce complexity, and enable AI at scale



Executive summary

Enterprises today operate in a fundamentally different data landscape than even a few years ago. Postgres has become the standard open source database for transactional and analytical workloads, but the environments in which it runs have proliferated. Organizations now deploy databases on premises, in the cloud, at the edge, and in hybrid environments.

While this distribution enables flexibility and scale, it introduces a critical business challenge: There is no unified way to manage the data estate. Instead, organizations rely on fragmented tools, inconsistent processes, and environment-specific operational models. This fragmentation increases operational costs, slows innovation, and introduces risk that compromises governance, security, and sovereignty.

This data sprawl and lack of consistent operations causes teams to spend excessive time on manual database maintenance instead of delivering value. Performance issues are harder to diagnose due to siloed observability. Security and compliance risks increase as policies are applied inconsistently. Most important, the organization's ability to scale data-driven initiatives—particularly AI and real-time analytics—is constrained.

EDB Postgres AI (EDB PG AI), with Hybrid Manager, addresses this challenge by providing a unified, sovereign control plane for managing, monitoring, and optimizing Postgres across hybrid and multi-cloud environments—enabling organizations to operate their entire data estate as one system.

Why unified control matters

The urgency for unified control is driven by two converging trends:

1. **Hybrid and multi-cloud architectures have become the default infrastructure for enterprises:** Organizations run complex workloads across multiple environments to achieve flexibility, resilience, and regulatory compliance. However, without unified observability and management, this becomes a barrier rather than an advantage.

2. AI and analytics are placing new demands on data

infrastructure: These workloads require consistent, reliable access to data across environments. Fragmented systems cannot support this requirement without latency, lag, or inaccuracies.

Organizations that successfully unify their data operations gain a significant competitive advantage. They are able to move faster, optimize costs, and deliver better customer experiences.

EDB PG AI enables this transformation by providing the operational foundation required to support modern data strategies.

The strategic shift: From fragmented operations to unified control

EDB PG AI enables a shift from managing databases as isolated systems to managing them as part of a unified, governed platform. Instead of relying on separate tools and processes for each environment, organizations gain a unified operational model that standardizes how Postgres is deployed, managed, and optimized.

This eliminates the trade-off between control and simplicity. Organizations no longer need to choose between manual management, which provides control but increases complexity, and cloud-managed services, which simplify operations but risk sovereignty. EDB PG AI delivers both: automation with full enterprise control.

By centralizing lifecycle management, observability, and policy enforcement, EDB PG AI enables organizations to scale their data operations without increasing operational overhead.

Business impact: Operational efficiency, cost reduction, and faster innovation

EDB PG AI delivers measurable business value across four key dimensions: operational efficiency, cost optimization, risk reduction, and faster innovation.

Operational efficiency improvements are delivered through built-in automation. Routine tasks such as provisioning, scaling, backup management, and upgrades are standardized and automated, reducing the need for manual intervention. Organizations can deploy Postgres clusters up to 10 times faster than traditional methods, accelerating time to value for new applications and services.

Cost optimization is achieved through improved resource utilization and performance tuning. By embedding intelligent recommendations into the platform, EDB PG AI automatically identifies inefficiencies and recommends optimizations that can reduce infrastructure costs by up to 40% per workload. This allows organizations to do more with existing resources while avoiding over-provisioning.

Risk reduction is driven by consistent policy enforcement and unified observability. Security, availability, and governance policies are applied at the data layer, reducing the likelihood of compliance violations, outages, or governance gap. At the same time, integrated telemetry provides visibility into ongoing system behavior and the ability to audit previous changes or notable events, enabling faster issue detection and resolution.

Innovation is accelerated by removing operational bottlenecks. Teams can focus on building new capabilities rather than on reactive management and maintenance, enabling faster delivery of data-driven applications and AI initiatives.

Operational transformation: From tool sprawl to platform

A key advantage is EDB PG AI's ability to replace fragmented tooling with a unified platform. Traditional environments require multiple tools for provisioning, monitoring, backup, and optimization. Each tool introduces complexity and requires significant integration effort.

EDB PG AI consolidates these functions into a single system. This reduces operational overhead, simplifies workflows, and improves reliability. Teams no longer need to switch between tools or reconcile conflicting data sources. Instead, they operate within a consistent environment that provides a complete view of the entire Postgres fleet.

This shift from tool-based to platform-based operations is critical for scaling data infrastructure effectively.



Business value comparison

Organizations evaluating how to manage their Postgres estate typically consider several approaches, each with distinct trade-offs.

	EDB PG AI	Cloud DBaaS (RDS, Azure, Cloud SQL)	DIY/Manual (CLI, scripts)	Kubernetes operators/laC
Strengths	Unified control, automation, sovereignty	Simplified operations, managed services	Full control, flexibility	Automation within container environments
Limitations	Adoption effort	Vendor lock-in, limited sovereignty, reduced deployment flexibility	High complexity, slow deployment, resource intensive	Fragmented tooling, deep expertise required
Business impact	Lower cost, faster innovation, full control	Faster setup but constrained control	High cost, limited scalability	Partial improvement, still complex

*Competitive comparisons are based on publicly available information and are subject to change as vendor offerings evolve and new information is made available. All product names, trademarks, and registered trademarks are the property of their respective owners.

Technical value delivered in business terms

Standardizing operations through a centralized control plane eliminates variability and reduces risk. By embedding intelligent recommendations into the platform, EDB PG AI enables proactive optimization, improved performance, and reduced costs. By maintaining sovereignty, it ensures that organizations retain control over their data and comply with regulatory requirements.

Most important, EDB PG AI enables organizations to manage distributed databases within a single pane of glass, which is essential for supporting modern applications and AI workloads.

Technical comparative analysis (relevant to business)

The following table highlights how EDB PG AI compares to alternative approaches from a technical capability perspective, translated into business impact.

Capability area	EDB PG AI	Cloud DBaaS	DIY/manual	Kubernetes operators
Control plane	Unified across all environments	Vendor-specific	None	Manual
Deployment flexibility	Hybrid, multi-cloud, on prem	Cloud only	Flexible but inconsistent	Kubernetes-centric
Observability	Unified, cross environment	Limited to provider	Fragmented	Fragmented
Automation	Policy driven, enterprise controlled	Vendor controlled	Minimal	Partial
Data sovereignty	Full enterprise control	Limited	Full	Full
Operational complexity	Low	Low-medium	High	Medium-high
Vendor lock-in	None	High	None	Low

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Quantified outcomes

EDB PG AI delivers measurable improvements that directly impact business performance:

Metric	Improvement	Business outcome
Cluster deployment	Up to 10x faster	Faster time to market
Cost efficiency	Up to 40% reduction	Lower infrastructure spend
Observability	200+ unified metrics	Faster issue resolution
Operational effort	Up to 10x faster to optimize	Higher team productivity

Why EDB PG AI wins

EDB PG AI addresses the root cause of modern data challenges: fragmentation. Instead of adding another tool to the stack, it replaces fragmentation with unification.

It provides a single, unified control plane that works across all Postgres environments, eliminating silos. It automates complex operations while maintaining enterprise control, removing the trade-off between simplicity and sovereignty. It embeds intelligence into the platform, enabling continuous optimization.

This translates into a clear outcome: a data infrastructure that is simpler to operate, more cost-efficient, and better aligned with business needs.

EDB Postgres AI: The sovereign data and AI platform for the agentic enterprise

EDB PG AI brings together a unified data layer, governance, sovereign control and orchestration, and an agent runtime environment, giving enterprises a trusted foundation for AI on infrastructure they own and control. The platform unifies transactional, analytical, and AI workloads in a single Postgres-based architecture—eliminating ETL, data movement, and operational fragmentation. And you choose where and how to deploy: on-premises, cloud, managed, or certified appliance.

The outcome: production-ready sovereign AI in days or weeks, not months.



EDB Postgres® AI (EDB PG AI) is the sovereign data and AI platform for the agentic enterprise. Built on Postgres, the world's leading open source database, EDB PG AI unifies transactional, analytical, and AI workloads in a single governed architecture, on-premises and across clouds. To learn more, visit www.enterprisedb.com.