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EDB

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THE CHALLENGES

Modern enterprises manage data across multiple clouds and on-premises deployments. Database administration is often undifferentiated heavy lifting that distracts operators and engineers from more value-oriented work like improving app scalability and accelerating time to market to keep up with the growing demands of customers. Today, organizations often turn to public cloud database-as-a-service (DBaaS) offerings to drive operational efficiency, but these services have major limitations: they limit hybrid deployment flexibility, lock enterprises into costly cloud consumption patterns as they scale, and lack portability to other platforms – creating just another form of vendor lock-in.

- **Limited deployment flexibility:** Organizations manage databases in the public cloud, private cloud, on-premises, and other locations. The environment affects the databases' manageability, compatibility with other technology, scalability, flexibility, and compliance.

- **Complex management:** It is difficult to maintain and manage databases spread across various environments. Managing updates and backups and ensuring availability, security, and performance becomes complex when dealing with disparate legacy and cloud systems.

- **Slow application development:** Siloed data sources contribute to complicated pipelines and slow development, especially when database administration becomes too complex and time consuming.

THE SOLUTION

EDB Postgres® AI provides the automation, scale, and simplicity of a DBaaS, combined with hybrid deployment flexibility and data sovereignty, helping you to grow and innovate faster. EDB Postgres AI offers centralized management over enterprise data estates using the Hybrid Control Plane, a single software installation to deploy and manage EDB Postgres software and services. The Hybrid Control Plane enables database automation and end-to-end observability, with the freedom to deploy and manage sovereign databases in your environment of choice.

- **Deployment flexibility:** Enable EDB Postgres AI in self-hosted, data sovereign environments – in public or private clouds, multi-cloud, on-premises, or as an integrated hardware appliance.

- **Database automation:** Eliminate database administrative tasks with automated provisioning, backups, user management, point in time recovery, activity logs, and more, ensuring high quality execution at scale. Enable hybrid DBaaS infrastructure – even in your private data center.

- **Single pane of glass:** Monitor, observe, and respond to issues in real time across hybrid and multi-cloud environments to keep databases secure, ensure performance, and provide up to 99.999% availability – all through a single, unified control plane.

- **Hardened Postgres:** Built-in security and disaster recovery features support apps that won't go down, so you can leverage open source technologies for mission-critical applications. Activity logs, user management, data redaction, and SQL injection protection ensure security across your database clusters.

THE BENEFITS

Spend less time on the undifferentiated heavy lifting of database administration to focus more on innovating as your business grows.

- **Grow with data sovereignty:** Achieve data sovereignty and future-proof your data platform for growth and scale with a single control plane for hybrid environments.

- **Improve operational efficiency:** Simplify management of hundreds of database clusters. Advanced automation and observability features keep track of 200+ metrics, speed up app performance up to 8x, identify problems and bottlenecks up to 5x faster, and optimize ownership costs..

- **Performance and availability:** Ensure performance and up to 99.999% availability across your Postgres data estate.

- **Faster app development:** Accelerate modern application development with less complexity through integrated support for diverse data requirements. Leverage open source Postgres technologies with EDB's enhanced extensions and extensive knowledge as the key contributor to Postgres.

THE OUTCOMES

- Protect customer data. Ensure governance of sensitive data by keeping it in sovereign databases and leveraging access management and activity log features.

- Reduce database administrator (DBA) hours required to manage the system (versus legacy systems) so DBAs can focus on enabling application development.

- Ensure performance and availability of hundreds of database clusters while leaving the majority of database provisioning, administration, security, and other management tasks to EDB.
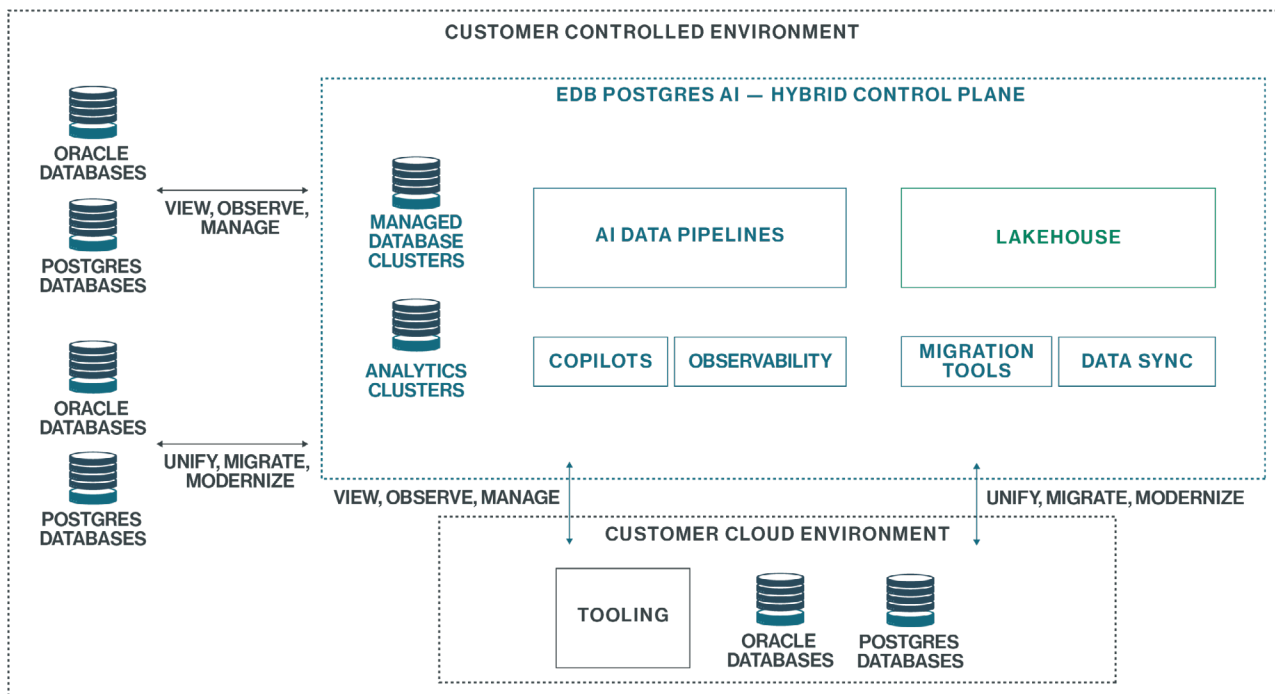

Figure 1. EDB Postgres AI enables a hybrid DBaaS: database automation and advanced observability with hybrid deployment flexibility.

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FREQUENTLY ASKED QUESTIONS

Q: What is a DBaaS?

A: DBaaS, or database-as-a-service, is a model where the database provider performs all or most of the administrative tasks and maintenance of the database and operating system. The user can then focus on utilizing the database. This model is typically only available in the cloud.
Key characteristics include:

- Cloud infrastructure hosting

- Automation of database administration tasks like monitoring and access control

- Self-service capabilities for other database lifecycle operations (backups, patching)

Q: What makes EDB Postgres AI different from other DBaaS offerings?

A: EDB Postgres AI can be used as a hybrid DBaaS, unlike other DBaaS solutions that can only manage cloud databases. Some key differentiators are:

- Hybrid deployment flexibility – organizations are not limited to cloud to have the DBaaS experience

- Support for and enhancements to various Postgres extensions

- Built-in observability across hybrid and multi-cloud environments

- Easy management and administration, including automated backups, point-in-time recovery, provisioning, activity logs, user management, and alerts and notifications — even in your private data center

- Centralized data access, which simplifies data management and enhances security and consistency

Q: Can I use a DBaaS for on-premises deployments?

A: DBaaS offerings are typically for cloud services only. With EDB Postgres AI, however, you can deploy on the infrastructure of your choice – public cloud, hybrid cloud, and on-premises.

Q: Does EDB Postgres AI work as a hybrid DBaaS on existing infrastructure?

A: Yes, you can deploy EDB Postgres AI on your existing infrastructure.

Q: What benefits do I get from hybrid DBaaS?

A: Some key benefits of a hybrid DBaaS include:

- Performance and availability

- Faster app development

- Operational efficiency

- Security and compliance

Q: How does a hybrid DBaaS help developers get applications to market faster?

A: Using a hybrid DBaaS puts power into the hands of developers. EDB Postgres AI makes data management, administration, and access easy. This helps free up time for DBAs so they can focus on mission-critical tasks. This is also helpful for developers who must scale, update, back up, monitor, and secure their databases without DBA oversight. With less time and complexity spent on these tasks, they can focus more on building apps that solve real business challenges. Plus, Postgres is developers' favorite database – EDB supports various Postgres extensions and enhances them with enterprise-grade features, enabling the use of open source technologies for mission-critical applications.

Q: Is a hybrid DBaaS a good fit for my industry?

A: If you are in an industry with highly regulated data that must remain on-premises, like finance, healthcare, or government, you should consider a hybrid DBaaS so you can leverage the security of dedicated deployments with the cost and agility benefits of cloud. A hybrid DBaaS can work for any industry, though – companies who deploy Postgres on multiple environments can consider EDB Postgres AI to help consolidate complex database environments and simplify management, allowing their teams access to data without complexity.