EDB
Postgres for the AI Generation

Slash Your Database Costs and Boost IT Efficiency with EDB Postgres

The EDB Guide to TCO Reduction to Achieve Your Business Goals

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Introduction

Rising IT costs are on the list of many organizations' most pressing challenges across numerous industries. For these organizations, managing total cost of ownership (TCO) is still a priority as they seek ways to make improvements to their IT infrastructure and increase return on investment (ROI). This paper explores EDB Postgres, an open source database platform that is leading the way in reducing database TCO while enhancing IT efficiency.

This paper looks at how EDB Postgres can:

Reduce database costs, thus lowering licensing fees, maintenance costs, and hardware needs, due to its open source model and the way it productively uses resources.

Increase IT efficiency by enabling databases to be managed more quickly with intuitive tools and automation and by freeing up IT staff for strategic work.

Increase security and compliance with some of the toughest security available in any database, and tracking, control, and support for compliance required by the highest standards in business.

Get increasingly better performance and scalability, as this database uses some of the most modern database architectures to its advantage and is available in deployment models that allow your business to get the right product in the right place at the right time to safeguard your investment.

Bringing EDB Postgres to your team may just bring the extra edge of database efficiency and savings your organization needs, enabling you to reach beyond the sky's limit for your business.

Addressing the top five concerns in TCO

This section addresses the universal challenge of IT cost management, from escalating licensing fees to complex management processes that strain budgets across all roles, from CTOs to DevOps practitioners. Discover how EDB Postgres tackles the top five IT cost concerns, offering solutions that promise financial ease and enhanced efficiency.

1. IT cost escalation

The cumulative impact of proprietary database licensing fees, hardware costs, and extensive manual management processes continually depletes IT budgets. Consider the implications:

- The necessity to pay substantial renewal fees due to **vendor lock-in** restricts innovation budgets.
- The requirement for **hardware upgrades** to support database scalability imposes additional financial burdens.
- **Operational overhead,** such as manual tasks related to backups, upgrades, and security measures, consume significant IT staff time, detracting from their focus on strategic projects.

2. Challenges in backup and recovery

The aftermath of IT disasters highlights the significant time and financial costs involved in database backup, recovery, and restoration processes. Key issues include:

- Extended recovery periods of **operational downtime** that result in productivity losses and diminished revenue, impacting the organization broadly.
- **Manual backup processes** that are susceptible to errors, risking data integrity and placing additional strain on IT personnel.
- The **high fees** associated with proprietary backup storage solutions, which exacerbate financial strain during recovery efforts.

3. Data security concerns

Ensuring the security of sensitive information amidst a dynamic threat landscape is essential but often entails substantial investment. Critical considerations involve:

- **Regulatory challenges,** as achieving compliance with strict data privacy laws frequently necessitates expensive external tools and continuous audits.
- **Data breaches,** which carry significant financial penalties, reputational damage, and potential customer loss.
- **Limitations of user access and data encryption,** which exposes vulnerabilities to internal and external threats.

4. Cloud migration complexities

While migrating data to the cloud offers potential benefits in agility and scalability, apprehensions regarding vendor lock-in, data mobility, and unexpected expenses persist. Specific concerns include:

- **Lock-in with a single cloud provider** can limit flexibility and lead to increased costs.
- The complexity and expense of data **migration processes** can obstruct the transition to cloud environments.
- **Hidden fees** for cloud services and data transfer can significantly exceed budgetary allocations.

5. Integration and data sharing barriers

Dismantling data silos to foster collaboration and gain insights is often hindered by high integration costs and the need for specialized knowledge. Issues to address include:

- Critical **data isolated** within disparate systems can impede collaborative efforts and data-informed decision-making.
- The adoption and maintenance of costly integration **platforms demand significant resources and expertise.**
- Managing data access while ensuring **security and compliance** presents considerable challenges.

These TCO concerns underscore the necessity for strategic IT investments and the selection of solutions that mitigate financial pressures while enhancing operational efficiency.

How EDB tackles TCO concerns

EDB Postgres leverages its open source nature to significantly disrupt traditional cost structures in IT cost management, offering substantial savings in the realm of proprietary database expenses. It combines flexible deployment options with a transparent pricing model, enabling IT professionals to drastically reduce costs without sacrificing capability or scalability.

This strategic approach optimizes software licensing, hardware procurement, and staffing budgets, thereby freeing up resources for innovation and growth.

In terms of database backup, recovery, and restore, EDB Postgres transforms these traditionally cumbersome tasks into a streamlined, automated process. Utilizing point-in-time recovery and continuous archiving, it minimizes downtime and manual labor associated with data preservation, leading to a notable reduction in operational costs and protecting against revenue losses during recovery periods. This ensures a cost-effective and robust data management strategy.

In demolishing data silos, EDB Postgres promotes an environment of seamless collaboration and integration. By supporting a broad range of data formats and employing standard integration protocols, it obviates the need for expensive middleware or custom adapters, reducing costs and fostering faster, more effective teamwork and data-driven decision-making.

Addressing data security and protection, EDB Postgres stands as a fortress of security amidst the prevalent threat of data breaches. Its comprehensive suite of built-in protections, including encryption and role-based access control, secures data against threats at no additional cost. Audit logging further bolsters compliance efforts, enabling organizations to meet regulatory demands effortlessly and avoid the severe repercussions of security failures.

Lastly, for cloud migration, EDB Postgres introduces EDB Postgres AI Cloud Service, which optimizes costs with its cloud-native design and transparent, predictable subscription model. This service, along with its robust partner ecosystem, eases the complexities of cloud migration.

Migrating to Postgres with EDB

EDB Postgres is highly effective at driving down your TCO, but it has far more to offer than financial savings. The EDB Enterprise plan extends the power and security of Postgres for enterprises that need Oracle database compatibility.

The choice to migrate to EDB Postgres can deliver various benefits that equip the organization to thrive:

- **Enhanced performance and scalability:** EDB Postgres leverages cutting-edge database architecture, delivering exceptional performance and scalability for the most demanding workloads, such massive data processing, real-time analytics, and more. EDB Postgres scales effortlessly to meet these requirements.
- **Open source innovation and community:** Because it's open source, EDB Postgres benefits from a global community of developers and contributors. This active community ensures that EDB Postgres continues to innovate, offers long-term support, and provides a deep well of expertise and resources for you to draw from.
- **Flexibility and choice:** EDB Postgres gives you the option to choose the best deployment model for your needs — on premises, in the cloud, or in a hybrid environment. This flexibility means you can maintain control over your data and your infrastructure, allowing you to be agile and responsive to the changing demands of your business.

- **Effortless migration with EDB tools:** With the full suite of migration tools, it has never been easier to transition to EDB Postgres. The powerful migration tools smooth the way, quickly and simply, while minimizing disruption.

  – **EDB Migration Toolkit**: This flexible command-line tool delivers fine-grained control over migration operations, enabling data to be moved from a variety of database platforms, including MySQL, Microsoft SQL Server, and Sybase Adaptive Server Enterprise.

  – **EDB Migration Portal**: This easy-to-use web-based tool instantaneously evaluates your migration project's complexity and generates DDLs for EDB Postgres Advanced Server, streamlining the planning and execution phases.

Addressing top migration concerns

EDB understands the concerns that come with migrating to a new database. Disruption, risk, and cost are all valid worries, but they shouldn't hold you back from the incredible benefits that EDB Postgres Advanced Service offers. This section addresses those concerns head-on and shows you why migrating with EDB is smooth, cost-effective, and packed with advantages.

Will my business suffer from downtime and disruption during the migration?

EDB's proven tools and methods, combined with best practices based on years of experience, ensure the quickest, most efficient migration. EDB will work with you to establish a plan that minimizes disruption — keeping your business on track and serving your customers as we seamlessly transition your data to EDB Postgres. EDB also has advanced data migration tools that employ change data capture (CDC) technology to minimize downtime when migrating off of legacy databases

Is migrating to a new database complex and risky?

EDB's dedicated consultants, who have an average of 10+ years of experience, boast direct access to the world's top Postgres contributors, which mitigates your risk and ensures peace of mind. Not only will EDB help you crush project milestones and deliver a smooth migration, but we'll also implement robust security measures, high availability solutions, and ensure compliance adherence — all of which eliminate stress and potential pitfalls.

Will this migration break the bank?

EDB recognizes that staying on budget is crucial, and lets you do just that. The transparent pricing and dedication to efficiency, combined with the open source nature of EDB Postgres, allow for significant cost savings. They're savings that only increase thanks to the improved resource utilization and reduced management capabilities EDB Postgres can grant you, which both lower long-term operational costs. EDB will even help you start building a compelling business case today by calculating the ROI of your migration, further cementing the financial advantages in clear terms.

To quantify these potential savings, take advantage of EDB's Oracle Migration Calculator. This free tool helps you estimate the cost reductions you can achieve by migrating from Oracle to EDB Postgres. With this information, you can build a compelling business case for your migration and clearly demonstrate the financial advantages.

Get expert support to optimize your Postgres Advanced Server

Achieve performance optimization and cost efficiency with EDB's targeted support services, Remote DBA, and custom solutions tailored for your specific EDB Postgres deployment needs.

EDB support services

EDB offers a comprehensive suite of support services designed to enhance the performance, reliability, and efficiency of your EDB Postgres setup. Whether you're in the planning phase, in the midst of deployment, or seeking to optimize your existing database infrastructure, EDB's tailored support services ensure that you have access to the expertise and solutions necessary for success.

EDB's packaged services offer a fast track to issue resolution and optimization across all stages of your Postgres journey. This includes:

- **Postgres strategy:** Development of a strategic roadmap tailored to your business objectives.
- **Quick deploy:** We ensure speedy deployment of Postgres solutions to meet your immediate needs.
- **Architectural health check:** Services include a comprehensive review and optimization of your current Postgres setup to enhance performance and reliability.
- **Embedded Postgres expert:** Elevate your team with the integration of a Postgres expert who provides bespoke advice and strategies. This ensures your database infrastructure is robust, efficient, and perfectly aligned with your business goals.
- **Custom services:** For challenges that require a specialized approach, EDB offers custom services. Whether you're navigating complex migrations or seeking to upgrade your system with minimal downtime, EDB ensures data integrity and optimal system performance tailored to your specific needs.
- **Technical account management (TAM):** With a dedicated TAM, you'll receive strategic guidance and preventive solutions to maximize your Postgres investment. Your TAM keeps you abreast of the latest features, best practices, and innovations in the Postgres world, ensuring your database infrastructure remains state-of-the-art.

Remote DBA and Professional Services

EDB's Remote DBA and professional services offer a holistic approach to database management, modernization, and skill enhancement for organizations utilizing EDB Postgres Advanced Server. These services are designed to ensure that your database systems are not only running optimally but are also leveraging the latest technologies and methodologies for enhanced performance and security. Here's a closer look at what these services encompass:

- **Remote DBA:** Enjoy 24/7 monitoring and management by certified database administrators to keep your database at peak performance, ensuring best practices for maintenance and security.
- **Professional services:** Fast-track your EDB Postgres Advanced Server projects with EDB's expert consultancy, from efficient migrations to modernizations, leveraging cloud technologies and EDB Postgres Advanced Server's advanced features for a modern database infrastructure.
- **EDB training programs:** Enhance your team's capabilities with comprehensive training courses, from foundational to advanced levels, ensuring effective management and optimization of EDB Postgres Advanced Server. Industry-recognized certifications validate your team's expertise, building confidence in your database infrastructure.

Successful migration case studies

Migrating your database might still seem like an intimidating task that may or may not be necessary, but there's no need to overthink it. Instead, you can learn about some real-world organizations that realized remarkable advantages by shifting to EDB Postgres Advanced Server and forging a partnership with the knowledgeable team at EDB.

As a frontrunner in remote telemetry solutions, Metasphere faced challenges in scaling due to its previously adequate Oracle-based system. The prohibitive licensing fees were diminishing the company's profit margins, and the system's limited cloud flexibility was obstructing its capacity to meet the strict data residency demands of its international clientele. Metasphere was in search of an economical solution that could effortlessly scale and conform to its international growth ambitions.

The introduction of EDB Postgres Advanced Server was a refreshing change from its limiting and costly Oracle system. Metasphere acknowledged the benefits of open source and the scalability that Postgres provided. Recognizing the risks associated with migration, EDB's proficiency was crucial. EDB collaborated closely with Metasphere to formulate a foolproof migration strategy, ensuring uninterrupted operation and business continuity. Utilizing EDB's migration tools and best practices, Metasphere meticulously migrated its data and applications, achieving a smooth transition.

Results:

- **Significant cost savings:** Liberated from the burdensome Oracle licensing fees, Metasphere saw a dramatic decrease in costs, which enabled the company to reallocate funds to strategic projects and offer more competitive pricing to its clients.
- **Global expansion:** Leveraging the open source nature and cloud-compatible architecture of Postgres, Metasphere was able to extend its services to international markets. It developed a more affordable on-premises solution based on Postgres for regions with stringent data residency laws, alongside a cloud-hosted option, broadening the company's market presence.
- **Enhanced performance:** The switch to Postgres was not only financially beneficial but also improved performance. Users across the organization enjoyed quicker response times and better data access, leading to heightened productivity and satisfaction.

MDS Global, a prominent BSS solution provider, encountered challenges with its flagship application built on DB2, which was becoming obsolete and unwieldy, affecting its sales cycle and innovation pace. Furthermore, MDS Global's powerful but expensive Oracle-based companion app was limiting its ability to reach out to smaller enterprises and emerging markets. The company required a modernization approach that would enhance development agility and make its offerings more accessible.

Seeing the potential in Postgres for both its performance and cost-effectiveness, MDS Global embarked on a significant modernization endeavor. The company transformed its Cloud Monetization Platform (CMP) from DB2 to Postgres, which introduced greater development flexibility, allowing it to quickly adapt to market demands and innovate more efficiently. Migrating an entire platform is complex, and EDB's invaluable expertise with robust Oracle conversion tools greatly simplified the process for MDS Global's Spend Analyser application, conserving time and resources.

Results:

- **Agile development:** With Postgres as their new foundation, MDS Global's development team achieved newfound agility, enabling faster iteration, quicker feature deployment, and rapid response to market changes. This agility has given the company a competitive advantage and improved customer satisfaction.
- **Cost optimization:** The move from Oracle and DB2 to Postgres resulted in significant cost savings, allowing MDS Global to price its solutions more competitively. This strategic decision expanded its reach to smaller companies and emerging markets, increasing its market share.
- **Simplified maintenance:** The vibrant Postgres community, coupled with EDB's extensive support, facilitated smooth maintenance and swift issue resolution. Developers were no longer constrained by proprietary limitations, benefiting from EDB's ready access to solutions and expertise.

ATU, a leading provider in the automotive services sector, faced challenges with its Oracle-powered online business platform, which was becoming increasingly costly and rigid. Vendor lock-in was impeding the company's agility to adopt new technologies and integrate with novel solutions, while high licensing fees were restricting its budget for strategic investments.

In pursuit of a flexible and future-proof solution, ATU turned to the open source giant, Postgres. By adopting Community Postgres for its new platform, ATU embraced the liberty and adaptability it offers, positioning the company's business for sustained success and growth. ATU's shift to Community Postgres marked the beginning of a new era for the company, providing a robust foundation that supports innovation, reduces costs, and offers unprecedented flexibility.

Results:

- **Flexibility and future-proofing:** Embracing Postgres allowed ATU to break free from the constraints of vendor lock-in, giving it the agility to adapt quickly to new technologies and market demands. This strategic move ensures that ATU's platform remains relevant and competitive in the fast-evolving fintech sector.
- **Cost efficiency:** The transition to an open source database system significantly reduced the financial burden of high licensing fees associated with Oracle. This cost-saving measure has freed up resources, allowing ATU to allocate funds to strategic investments and innovation, driving the company forward.
- **Enhanced scalability and performance:** By leveraging Postgres, ATU has achieved improved scalability and performance. The flexible architecture of Postgres supports ATU's growth ambitions, enabling it to handle increasing transaction volumes and customer demands efficiently.

Conclusion

As highlighted throughout this white paper, rising IT costs and the need for optimal resource utilization pose significant challenges for organizations across industries. Traditional, proprietary databases often contribute to these burdens, locking you in with expensive licensing fees, inefficient hardware requirements, and complex management processes.

Ready to embark on your journey to cost-effective database efficiency? Here are some next steps:

- Calculate your potential savings by migrating from Oracle to EDB Postgres with the Oracle Migration Calculator
- Download your free trial of EDB Postgres and experience the cost savings firsthand
- Schedule a consultation with an EDB database expert to discuss your specific needs and goals

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About EDB

EDB provides a data and AI platform that enables organizations to harness the full power of Postgres for transactional, analytical, and AI workloads across any cloud, anywhere. EDB empowers enterprises to control risk, manage costs and scale efficiently for a data and AI-led world. Serving more than 1,500 customers globally and as the leading contributor to the vibrant and fast-growing PostgreSQL community, EDB supports major government organizations, financial services, media and information technology companies. EDB's data-driven solutions enable customers to modernize legacy systems and break data silos while leveraging enterprise-grade open source technologies. EDB delivers the confidence of up to 99.999% high availability with mission-critical capabilities built in such as security, compliance controls, and observability. For more information, visit www.enterprisedb.com.