
EDB
Postgres® for the AI Generation
Embracing the Future of Tech with EDB Postgres®
5 Must-Read Oracle Migration Success Stories

Red Hat predicts that 80% of CIOs and IT leaders will increase their use of open source for emerging technologies in 2024.

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Transform your data and business outcomes with a modernized database

In a world moving faster than ever, businesses need to be even more responsive to the evolving, dynamic demands of their customers. Companies that survive and thrive in this era demand better data, and IT leaders are expected to drive more business value through modernization—including moving off of legacy data systems that simply can't keep up in today's world.

This has never been more applicable to scaling businesses, where downtime is unacceptable and flexibility, scalability, and security are necessities. Today, it is critical that these organizations have confidence that their core applications are reliable and robust, so they can focus on building new functionality and better products that meet customers not only where they are but where they're going.

This is why leading organizations are moving to open source technology infrastructures such as EDB Postgres. And it's also why you'll want to join them.

5 must-read success stories

See how today's top companies are navigating increasing critical-data workloads, customer expectations and costs, and the need to do more with their data by migrating from Oracle and building their future on EDB Postgres.

1. **USDA Forest Service:** Improving performance by 70% at less than 30% of the cost
2. **FBI:** Protecting the government's most sensitive data
3. **Ericsson:** Staying ahead by transforming database infrastructure
4. **telegra:** Driving innovation for next-gen telecommunications
5. **Metasphere:** Unlocking scalability with a modern database system

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CUSTOMER SUCCESS STORIES

USDA Forest Service Easily Migrates a Massive Geodatabase from Oracle to EDB Postgres

CUSTOMER:
USDA FOREST SERVICE

John Lovato
Database Architect

GOAL: Meet the necessary migration deadline with minimal impact to the business at the lowest cost

EDB SOLUTION: EDB Postgres Advanced Server

EDB

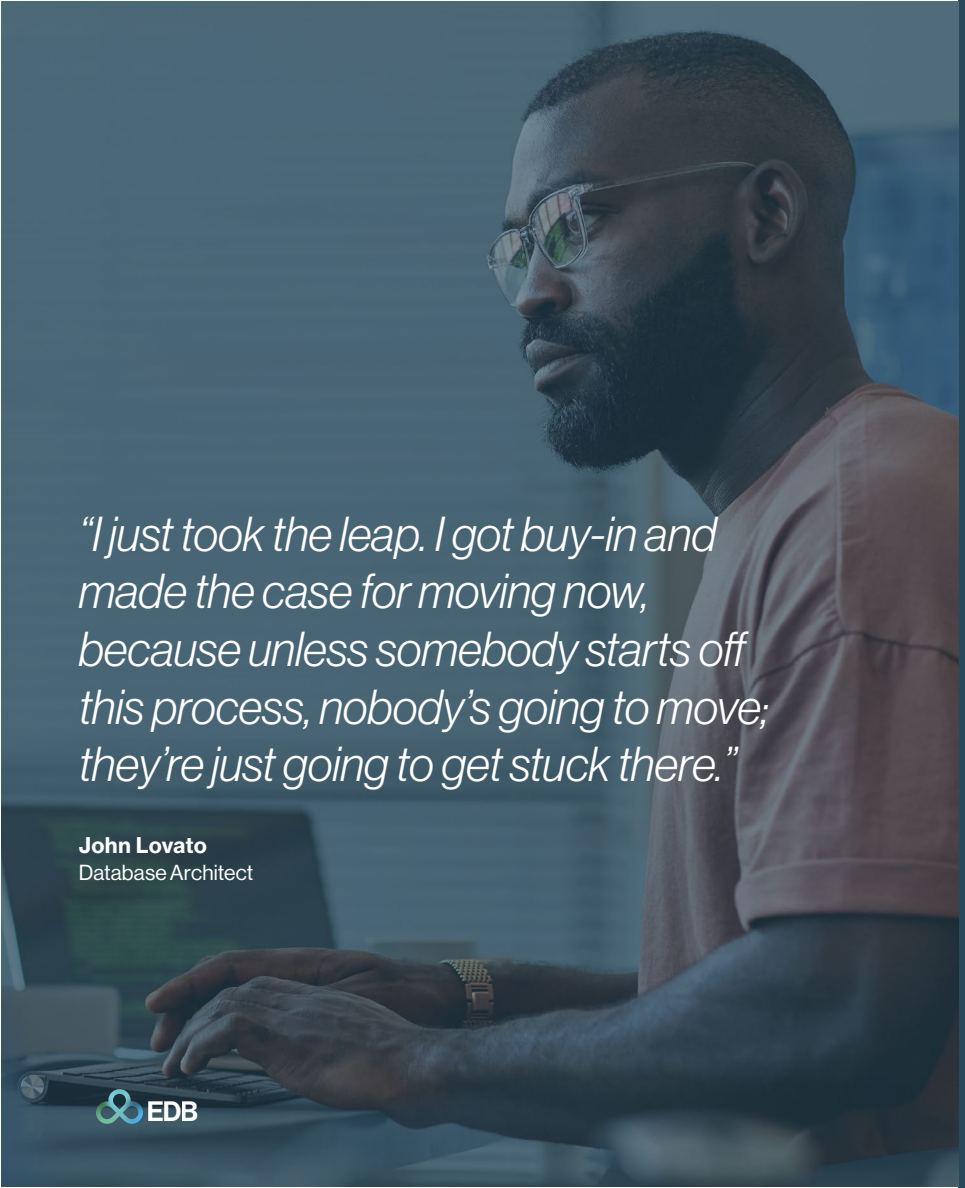
OVERVIEW

USDA Forest Service modernizes its tech stack to improve performance and slash costs

Having traditionally used Oracle database schemas to store mission-critical Esri geodatabases for daily work, the Forest Service needed to migrate its workloads to a more modern database model when Esri stopped supporting this geodatabase management type. Under a tight migration deadline, the Forest Service was able to complete a successful move to EDB Postgres—achieving a 70% improvement in performance at less than 30% of the cost.

> ***"We took the opportunity to modernize and to move to something lower cost—and a lot more performant than what we were getting with Oracle."***

John Lovato
Database Architect



A hard deadline and an easy choice

> ***“We were seeing how much we were paying Oracle, and it was just incredibly high. It seemed to be going up 10% to 15% per year. Moreover, we had a bunch of Oracle engineers who were just sick of dealing with Oracle.”***

John Lovato
Database Architect

The Forest Service stored its Esri geodatabases inside the Oracle schema. But in 2018, Esri announced that it would no longer support that model in its ArcGIS geodatabase beyond version 10.6.x. Esri had set a hard deadline—December 1, 2023—after which it would no longer support ArcGIS versions prior to 10.7.

The team began the search for a new, fully supported platform whose adoption would have minimal impact on customers, who relied heavily on these databases to do their work. The Forest Service needed a replacement that could reuse hundreds of thousands, even millions, of lines of existing PL/SQL code in its databases and move it all to a landing spot where the team could modernize it. Postgres was the obvious choice for two reasons: its deep compatibility with Oracle and ArcGIS’s support for storing geodatabases inside the Postgres schema through the PostGis extension.

EDB provides compatibility and full support

EDB Postgres Advanced Server (EPAS) offered all that Oracle compatibility and potential plus the full support the team needed. Ultimately, the Forest Service beat the migration deadline easily and described the journey as a triumphant success.

> ***"What really impressed me about this whole exercise was the availability of tools and the compatibility of the target system. The EDB migration tool kit, the migration portal along with other tools, make this possible. Without those tools I would not have had proper insight into the Oracle database and into the actual level of effort that might be required to migrate certain sizes, blocks of code, and certain different types of data objects."***

John Lovato
Database Architect

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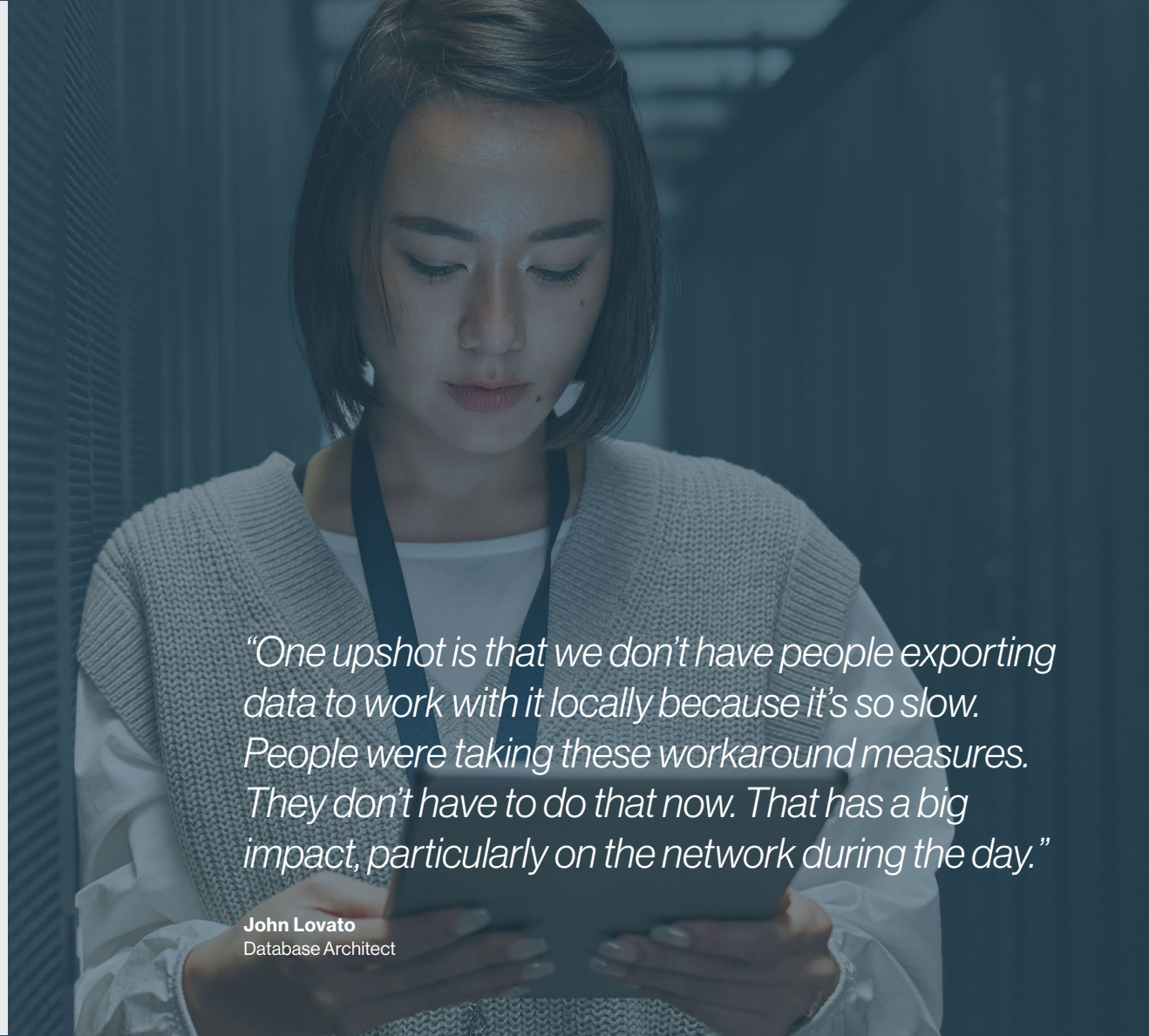

"One upshot is that we don't have people exporting data to work with it locally because it's so slow. People were taking these workaround measures. They don't have to do that now. That has a big impact, particularly on the network during the day."

John Lovato
Database Architect

The leap is worth it

Lovato advises that the entire endeavor is lower risk than potential users might think. "The cost to at least explore EPAS is very minimal. It's low-cost enough to build yourself a replica of your Oracle system now—and you can cancel subscriptions anytime you want, which makes it really nice. Up-front developer support delivered by EDB is a major added bonus."

He sums up in three words his recommendation to others who are thinking about ditching Oracle in favor of EDB Postgres: "Don't be afraid."

> ***"Even if you have hundreds of thousands or millions of lines of PL SQL code, don't let that deter you, because the migration portal is your friend and it's going to fix a lot of that stuff for you. I haven't found any Oracle code yet that's too sophisticated for my team to functionally replicate in EPAS."***

John Lovato
Database Architect

Oracle migration and modernization

Break free from Oracle and discover a comprehensive platform that supports high availability and enables operation across any cloud environment. Mission-critical apps operate seamlessly, without downtime or security threats—leaving you free to harness the advantages of Postgres.

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CUSTOMER SUCCESS STORIES

FBI Protects High-Stakes, Highly Sensitive Data with EDB Postgres

CUSTOMER:
FBI

GOAL: Cost-effectively migrate from Oracle to Postgres while protecting the government's most sensitive data

EDB SOLUTION: EDB Postgres Advanced Server

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OVERVIEW

EDB Oracle compatibility helps the FBI protect highly sensitive government data

Amid growing cyberthreats, the FBI prioritized its investment in a robust cybersecurity program. This increased investment in cybersecurity technology modernization included migrating key applications away from a cumbersome legacy Oracle infrastructure and into AWS cloud. The FBI used EnterpriseDB (EDB) to ensure an easy and cost-effective migration process and enable the flexibility to evolve alongside new technologies, while keeping critical data secure and protected.

According to a recent Accenture Research report, about 97% of organizations across industries have faced a surge in cyberthreats.

Cutting-edge technology is a necessity for the FBI

In today's threat landscape, the FBI deemed an increased investment in its cybersecurity technologies necessary. To create more tailored security measures, it was imperative that the organization gain more control over data management and infrastructure—which called for a much more flexible and cost-effective solution than the legacy Oracle database.

Legacy data infrastructure can't keep up in an AI era.

Shooting down sky-high fees with Postgres

The FBI knew it needed to modernize its infrastructure, but, unfortunately, Oracle's exorbitant and rigid licensing fees promised to make the migration process prohibitively expensive. Even worse, not only was the FBI unable to move its data but its database costs going forward also promised to be sky-high.

The solution was moving to an open source Postgres database, a far more extensible and reliable solution for managing highly sensitive data. The team turned to EDB, the leaders in Postgres, to ensure migration success.

Seamless security with EDB

EDB Postgres Advanced Server is the robust solution that made the migration of mission-critical applications and existing infrastructure into Postgres and AWS both easy and cost-effective, with minimal disruption and no data loss. The FBI's critical data stayed secure, and today the organization remains protected against possible threats or disruptions.

Run to your future faster and thrive in an open source world, with your data available where, when, and how you need it.

Flexibility in an evolving cyber landscape

By reducing vendor lock-in, the FBI has mitigated risks associated with that dependency and found the flexibility to evolve alongside new technology. The FBI is working with a database solution more suited to its needs and innovation goals, without being bogged down by inflexible software or frustrating licensing costs. And because of EDB's native Oracle compatibility, Postgres looks and feels just like Oracle, so there was no need to recode applications. FBI leadership trusted in EDB Postgres Advanced Server to protect some of the government's most sensitive data.

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CUSTOMER SUCCESS STORIES

Ericsson Powers the Future of Media with EDB Postgres

CUSTOMER:
ERICSSON

Tapan Shatapathy
Head of Content Management

Vladimir Jakobac
Product Manager

Suresh Neravati
Database Administrator

GOAL: Keep pace with growing content requirements by overhauling legacy systems

EDB SOLUTION: EDB Postgres Advanced Server

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OVERVIEW

Telecom giant Ericsson reinvents network capabilities to meet consumer demand

Ericsson, one of the largest telecommunication providers in the world, had a critical imperative to embrace digital transformation so that its customers could continue to deliver the personalized and high-quality programming their end users expect. Ericsson's IT systems needed to support and quickly process a growing amount of content, and its legacy database system simply could not keep pace. To address this massive challenge, Ericsson had to overhaul its content management system (CMS). Because increasing capacity and supporting more transactions would result in exorbitant costs, Ericsson chose EDB Postgres for its economical scalability, efficiency, and performance. Most of all, EDB's leading Oracle compatibility technology meant Ericsson's data teams could migrate off the legacy system without major app rewrites or introduction of radically new tools.

Mobile video consumption has been steadily increasing worldwide, representing 80% of all global mobile network traffic by 2028. By the end of 2029, each smartphone user will consume 56 GB of data every single month.

Ericsson Mobility Report June 2024

EDB

Modernize infrastructure or be left behind

Ericsson networks connect more than 2.5 billion subscribers and carry 40% of the world's mobile traffic. Because Ericsson's IT systems needed to support and quickly process a growing amount of content that its legacy database system couldn't handle, the company was at risk of severe network congestion, resulting in significant degradation of the user experience for billions of end users.

> ***"The content management demands being placed on our customers are increasing, and the processing power of our previous infrastructure could not keep up. EDB Postgres provided us with the performance and data management capabilities we needed to provide unparalleled results for our customers—all at an incredibly lower cost."***

Vladimir Jakobac
Product Manager

Overhauling the system without breaking service—or the bank

The team soon discovered that upgrading its CMS would come with exorbitant costs due to the legacy system's licensing and maintenance fees. This would cause a devastating hit on budget allocations for other critical IT projects. Ericsson needed flexible technology to keep pace with increasing demands without breaking the bank. It required low-latency video delivery, high capacity, high availability, and greater processing power to support multiscreen viewing.

The company determined that Oracle was not up to task due to the lack of customization and lack of integration with new technology compared to open source alternatives. Ericsson chose EDB Postgres to handle the high transaction volumes and complex queries.

"When planning our system re-architecture, we explored NoSQL and document store platforms as potential options, but none provided database compatibility that did not require application refactoring. EDB Postgres' combination of unstructured and relational database technologies provides us the freedom, flexibility, and performance for handling unstructured and semi-structured data that we need to optimally run our system."

Suresh Neravati
Database Administrator

> ***"Ericsson maintains the preeminent market position in offering an enterprise-class software solution for the end-to-end management of content operations for the television industry."***

Tapan Shatapathy
Head of Content Management

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A competitive edge for customers—and a game-changer for telecoms

Ericsson worked with EDB to replace its legacy database system with EDB Postgres Advanced Server. The result was a global release of the new and improved Ericsson CMS.

What was built was nothing short of game-changing for the industry as a whole: one centralized platform for the end-to-end management of content operations across all screens. It was built to accommodate future delivery platforms and networks, giving customers a continuous competitive edge. Incredibly, with the new CMS, Ericsson's title ingestion rate more than doubled at 11 per minute, with a content library that now scales up to 10 million titles—enabling its customers to capitalize on the explosive growth in content demand and confidently and quickly put more content in the hands of consumers.

Fueled by its successful transformation with EDB, Ericsson continues to be a world leader in the communications industry. As technology from 5G to XR and VR further increase mobile video consumption, Ericsson rests assured in its ability to deliver the incredible forms of entertainment to come.

EDB Postgres Advanced Server

Let your data thrive. Fast-track modernization by migrating schema and data from Oracle in 20 days or less, minimizing downtime and disruption. Leverage the full power of open source with an enterprise Postgres server that gives you Oracle compatibility plus mission-critical features including advanced replication, high availability, security, diagnostics, and reporting.

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CUSTOMER SUCCESS STORIES

telegra Drives Innovation for Next-Generation German TelecomProvider with EDB Postgres

CUSTOMER: **TELEGRA**

Christian Blaesing
Head of IT

GOAL: Modernize the IT infrastructure for increased agility to maintain 24/7 uptime

EDB SOLUTIONS: EDB Postgres Advanced Server, EDB Postgres Distributed

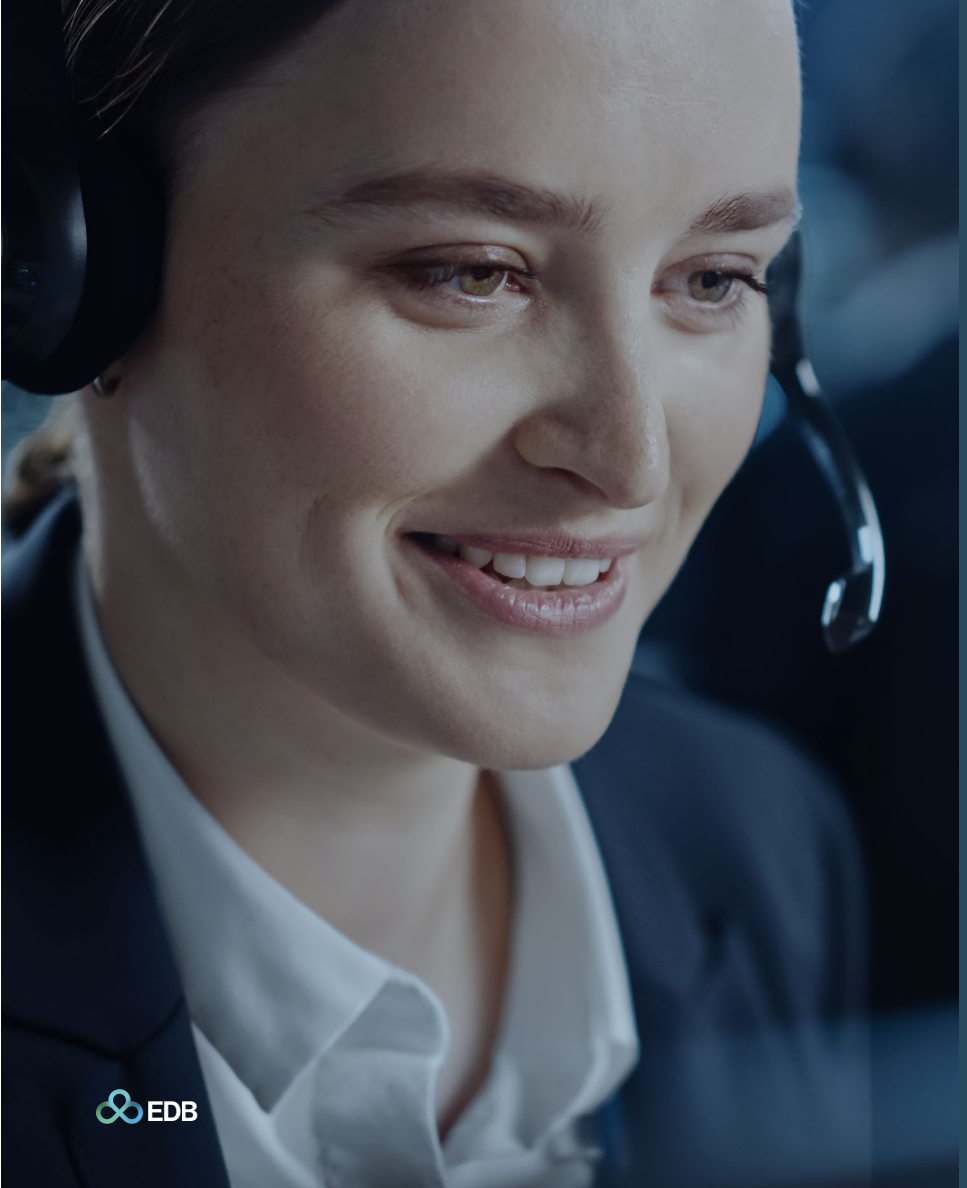
OVERVIEW

telegra embraces open source to ensure high availability for mission-critical workloads

The next-generation German telecom provider telegra, which specializes in delivering call center applications to businesses, was looking to modernize its IT infrastructure for increased agility and maintain 24/7 uptime, amid spiking work-from-home internet traffic during the COVID-19 pandemic. telegra switched from Oracle to EDB Postgres Advanced Server with EDB Postgres Distributed in an effort to improve reliability, reduce cost, and simplify operations.

This transformation involved moving away from commercially licensed databases, such as Oracle, and adopting an open source approach in the company's two German data centers, providing high availability for mission-critical Postgres databases. By adopting EPAS and EDB Postgres Distributed, telegra had confidence that its core applications would be reliable, robust, and scalable.

In a survey conducted by Information Technology Intelligence, 88% of respondents reported that one hour of downtime cost more than $300,000, and 87% of respondents deemed an uptime of 99.99% to be the minimum acceptable level of reliability for mission-critical systems.



Seeking agility while maintaining 24/7 uptime

While telegra's VoIP infrastructure had always employed a primary-primary data center model, its web applications used a primary-failover data center model, which could not deliver quick enough response to changing customer demand and ensure geo-distributed extreme high availability at the same time. To provide greater reliability and scalability, the company moved to a primary-primary setup for both applications and databases, with load balancing applied to all applications in both data centers.

As part of the shift to a primary-primary data center model, telegra switched from Oracle to EDB Postgres Advanced Server (EPAS) with EDB Postgres Distributed in an effort to improve reliability, reduce cost, and simplify operations.

> ***"We decided to embrace an open source software strategy, because we see it as far more transparent, reliable, and secure. We know we can review the software at any time, which gives us greater confidence in the functionality and its configurability. Postgres gives us greater security than with any closed source database, as well as far greater flexibility to switch vendors and avoid expensive, traditional, perpetual licensing."***

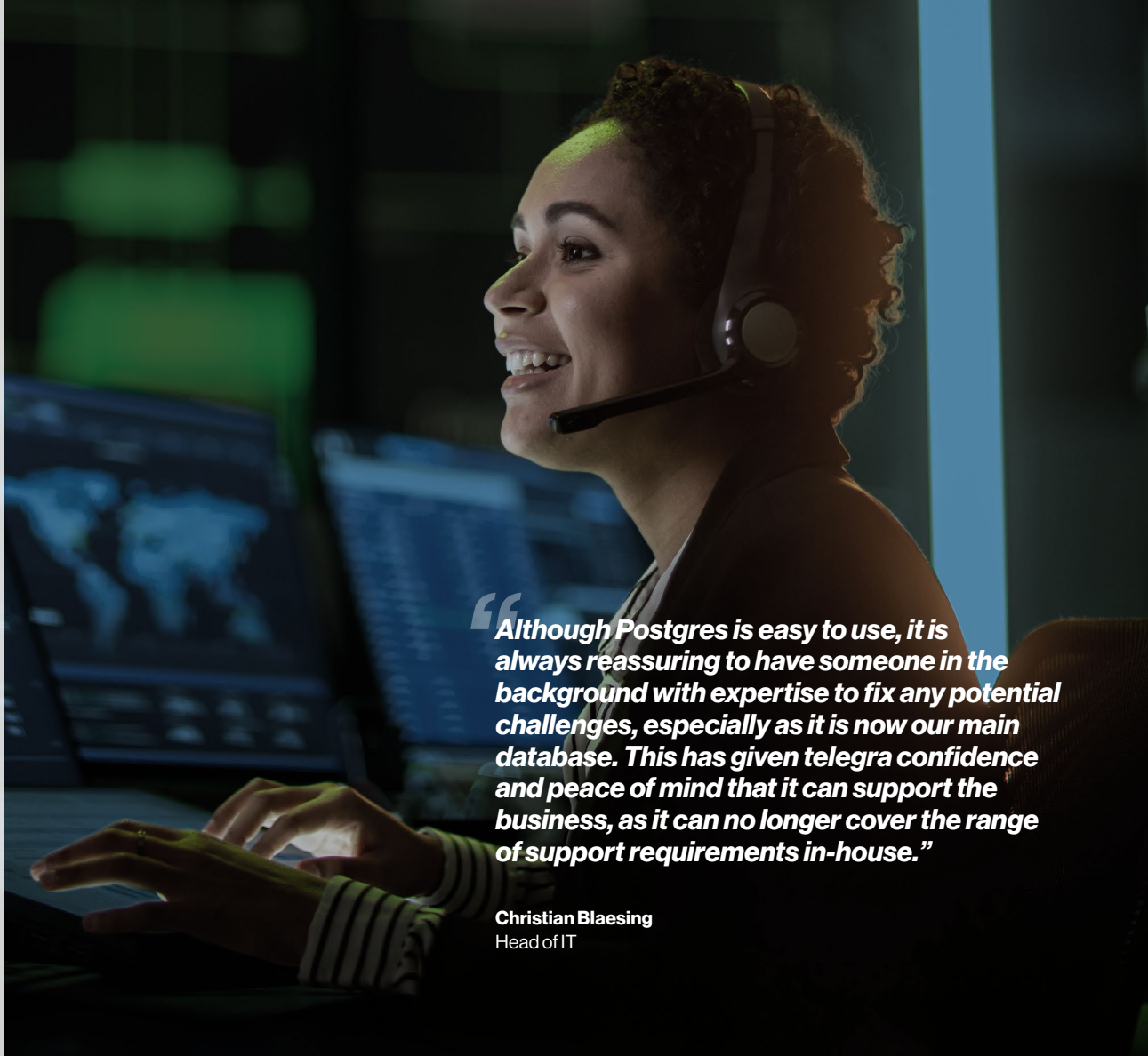
Christian Blaesing
Head of IT

Ensuring reliability and security with open source

In the past, telegra had used several different databases, including MySQL, Oracle, and Postgres. Oracle databases in particular incurred significant licensing costs and created a complex admin environment. The legacy primary-failover data center setup required shutting down the primary database and rebuilding it after shifting to the failover. This involved significant manual work and left telegra with only one primary data center at any given time, compromising reliability.

telegra has many clients for whom data security is critical and who insist on their data being hosted in Germany by a local company. Additionally, telegra experienced high volumes of voice traffic across its network, which made delivery via the cloud prohibitively expensive compared to running services in its own data centers. Moreover, as a telecoms operator, telegra is required to have a point of presence (PoP) to link up with traditional carriers such as Deutsche Telekom and BT, which do not connect to services through the cloud.

telegra decided the most effective solution for its architecture modernization was to host the data itself and choose EPAS as its main database.



“Although Postgres is easy to use, it is always reassuring to have someone in the background with expertise to fix any potential challenges, especially as it is now our main database. This has given telegra confidence and peace of mind that it can support the business, as it can no longer cover the range of support requirements in-house.”

Christian Blaesing
Head of IT

Supporting the most demanding applications—anywhere, anytime

EDB Postgres Distributed was a critical element of telegra's primary-primary data center setup, providing true high availability for Postgres databases used in demanding industry verticals—including telecommunications, where downtime is unacceptable. EDB Postgres Distributed provides primary-primary replication, which enables customers to build multi-primary clusters with mesh topology and write to any server with the changes sent row by row to all the other servers that are part of the same bidirectional replication (BDR) group.

In addition to improving availability, the implementation is cleaner, as there are no complications with a primary-primary when evaluating different setup scenarios. It makes it easier to integrate legacy apps, as changes are needed only for a small number of requirements, such as sequences. The availability of good documentation also enables developers to get up to speed and work with the database in two to three hours.

As a result of implementing EDB Postgres Distributed, telegra now has two data centers running with load balancing, which helps deal with the eventuality of a split-brain situation (a failure condition based on servers not communicating and synchronizing their data to each other). If the lines between the data centers were to go down, they could continue to operate even in a split-brain scenario, because both data centers are able to handle all call types. Using EDB Postgres Distributed, telegra is now able to scale its solution just by adding another BDR node to support the rapidly growing number of customers.

EDB Postgres Distributed and expert support

Previously, telegra had managed Postgres in-house, but the decision to work with EDB gave telegra confidence that the setup would be accurate and clean. An EDB BDR specialist worked with telegra using its TPAexec tool to set up the database in two to three days.

Having adopted EPAS and EDB Postgres Distributed two years ago, telegra has not experienced significant downtime. The replication capability has worked smoothly, which is essential for the high availability of telegra's services.

Establishing stability for a dynamic environment

A key element of telegra's competitive advantage is the next-generation software capabilities it offers its customers, which include call centers that can average between 300 to 600 call agents. Such innovations are valuable to customers only if the network remains stable. The modernization of telegra's IT infrastructure, including its primary-primary data center strategy, ensured that it was well placed to provide the right support to those customers.

Rather than being consumed with fixing the database and understanding its complexities, the telegra team is able to focus on building new functionality and better products, which has enabled the company to become even more responsive to the evolving, dynamic demands of its customers.

EDB Postgres Distributed

Deploy multi-region clusters with five-nines availability to guarantee that data is consistent, timely, and complete, even during disruptions. This means an enhanced user experience and extended system capacity to deliver what you do best, whenever and wherever you operate.

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CUSTOMER SUCCESS STORIES
Metasphere Unlocks Data Value and Elevates Global Water Safety with EDB Postgres

CUSTOMER: **METASPHERE**

Chris Fryatt
Director of Product Management

GOAL: Upgrade the database to confidently handle the 10x increase in expected industry demand and support environmental sustainability

EDB SOLUTION: EDB Postgres Advanced Server

OVERVIEW

Metasphere protects the Earth's water with a database built to scale

As the impacts of climate change continue to unfold, monitoring water networks has become a global challenge of utmost importance. Metasphere, a leader in telemetry, planned to expand globally to meet this growing demand with EDB Postgres, a database that could handle the tenfold increase in expected industry demand and also support environmental sustainability.

The need for more than Oracle

Metasphere was set to face the global warming crisis and protect Earth's water, with plans to scale internationally. But the company hit a major roadblock with its existing database. Oracle's bias toward on-premises data centers conflicted directly with Metasphere customers' desire to keep data in-country, and it drove costs astronomically higher.

Metasphere needed to:

- Operate seamlessly in AWS, which would enable the team to confine customer data to a relevant region.
- Reduce licensing expenses to bring down the total cost for Metasphere's offering.
- Support a "land and expand" model that enabled new customers to get started with a small number of devices and then quickly and effortlessly scale as they added more and more devices.

This required a much more flexible, scalable database solution.

"Oracle's core-based licensing meant that customers of every size needed to purchase multiple database licenses just to run one instance. It dramatically increased the cost of our solution."

Chris Fryatt
Director of Product Management

> ***"Since migrating to Postgres, we've not only achieved our goals—we've exceeded them."***

Chris Fryatt
Director of Product Management

EDB

A cleaner, greener future with EDB Postgres

Metasphere chose Postgres and EDB as the leading platform to deliver on the requirements it needed to scale, including Oracle compatibility to make the shift. But the company faced another issue: It couldn't risk an outage during migration, which could result in water waste spillage, billions of dollars in recovery, and potential harm to the environment. With white-glove support from EDB, Metasphere successfully made the migration from Oracle to Postgres—without customer disruption.

With EDB powering its database, user response times and data access speed within the platform improved, which meant utility companies could take action even faster to prevent leaks. The migration allowed Metasphere to dramatically reduce licensing costs, both for itself and for its clients. And as a result of the partnership, Metasphere expanded its market opportunity, offering both a lower-priced, on-premises solution built on Postgres and a cloud-hosted offering for regulators and smaller organizations.

With EDB, Metasphere can now confidently take on the massive 10x increase in expected industry demand and support the universal need for environmental sustainability.

EDB Postgres Advanced Server

Scale to meet the needs of a global user base with a database that can scale with you. Take Postgres workloads from experimental to essential with hardened security, support, and compliance tools to help you standardize with Postgres across your enterprise.

BENEFITS

Today's most-loved database is ready for tomorrow's workloads.

Open source PostgreSQL on its own has proven to be transformational for many leading organizations. But by combining the synergy of AI with Postgres, you can increase opportunity and innovation. EDB Postgres AI does more than deliver access to enterprise-grade Postgres tools that support extreme high availability, unmatched Oracle compatibility, increased security, and mission-critical tasks. It also powers the strategic analytical and AI workloads that keep your business on the cutting edge.

Choose EDB Postgres AI for:

The highest confidence

Ensure business continuity for critical BFSI workloads with up to 99.999% availability, up to 5x throughput performance, and 30x average faster analytical queries compared to standard Postgres.

The deepest intelligence

Accelerate innovation with a complete toolkit for supporting AI applications using a single data layer, plus AI-driven copilots and automation to provide solutions for nonexpert users.

The fastest onramp

Modernize from legacy systems with the most comprehensive Oracle compatibility for Postgres, and a suite of migration tooling to get customers onboarded in days versus months or years.

Enhanced security

Maintain customer trust and prevent your database from being your brand's weak point. Ensure your database has the essential security features to comply with regulations and maintain peace of mind.

Open source power

Ensure that out-of-date tech stacks and architectures don't cost you customers and revenue and even future-focused tech employees. Instead, modernize and innovate with open source.

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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.

TRANSFORM YOUR BUSINESS **BY TRANSFORMING YOUR DATABASE**

As you've seen in these customer stories, with EDB as their support partner, leading organizations are successfully pivoting to meet current and future cloud, open source, and AI trends that drive long-term success. With a modern, open source database like EDB Postgres AI, your organization can accelerate innovation, comply with stringent security and storage requirements, prevent data loss, capitalize on AI tools, and unlock the full potential of your data—now and for years to come.

Discover how EDB can help you build your future on Postgres. Visit EDB or talk to your account representative today.