
EDB
Postgres for the AI Generation
Transforming Telecommunications with EDB Postgres®
4 must-read success stories

As of 2021, 95% of telecoms use open source code at least in some capacity, according to a Red Hat report. 59% are leveraging this technology for digital transformation.

Embrace the telecommunications evolution with a future-ready database

To keep up with accelerating business needs, the enterprise of the future needs to be more responsive than ever to the evolving, dynamic demands of its customers. Legacy solutions can't keep up; meeting this challenge requires a modern IT infrastructure. The database is at the heart of the modernization effort, as data is every organization's most valuable asset. Data is critical for everyday processes and product innovation, and AI systems and decision-makers rely on data for strategic decisions that enable business success.

The push for modernization has never been greater, especially in demanding industry verticals such as telecommunications, where downtime is unacceptable and flexibility, scalability, and security are the name of the game. These organizations need to have confidence that their core applications are reliable and robust, so they can focus on building new functionality and better products to meet customers not only where they are, but where they're going.

This is why top telecommunications organizations are moving to open source, cloud, and AI technology infrastructures like EDB Postgres AI. And it's also why you'll want to join them.

4 must-read success stories

See how today's top telecommunications companies are navigating increasing critical data workloads, higher customer expectations, and rising costs. Building their future on Postgres with EnterpriseDB (EDB) means businesses can unlock the full potential of their data and meet the demands of the AI generation.

1. **Ericsson** – Staying ahead by transforming database infrastructure
2. **telegra** – Driving innovation for next-gen telecommunications
3. **MDS Global** – Breaking free from legacy systems to unlock flexibility
4. **Linxup** – Eliminating downtime with modern, scalable tech

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CUSTOMER SUCCESS STORIES

Ericsson Powers the Future of Media with EDB Postgres

CUSTOMER: **ERICSSON**

EDB customer since August 2016

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

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 end users expect. Ericsson's IT systems needed to support and quickly process a growing amount of content, and the legacy database system simply could not keep pace. To address this massive challenge, Ericsson had to overhaul its content management system. Because increasing capacity and supporting more transactions would result in exorbitant costs, Ericsson chose EDB Postgres for its scalability, efficiency, and performance at a lower cost. 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 introducing 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.

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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 the 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 content management system would come with sky-high costs due to the legacy system's licensing and maintenance fees. This would be 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 multi-screen 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.

Oracle migration and modernization

Let your data thrive. Modernize Oracle systems and embrace the Postgres-led world with 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.

"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 needed to optimally run our system."

Suresh Neravati
Database Administrator

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 content management system.

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 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 is assured of its ability to deliver the incredible forms of entertainment to come.

EDB Postgres Advanced Server

Fast-track modernization by migrating schema and data from Oracle in 20 days or less, minimizing downtime and disruption. Accelerate your business with an enterprise Postgres server that leverages Oracle compatibility and mission-critical features including advanced replication, high availability, security, diagnostics, and reporting.

> ***"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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CUSTOMER SUCCESS STORIES

telegra Drives Innovation for Next-Generation German Telecom Provider with EDB Postgres

CUSTOMER: **TELEGRA**

EDB customer since 2018

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

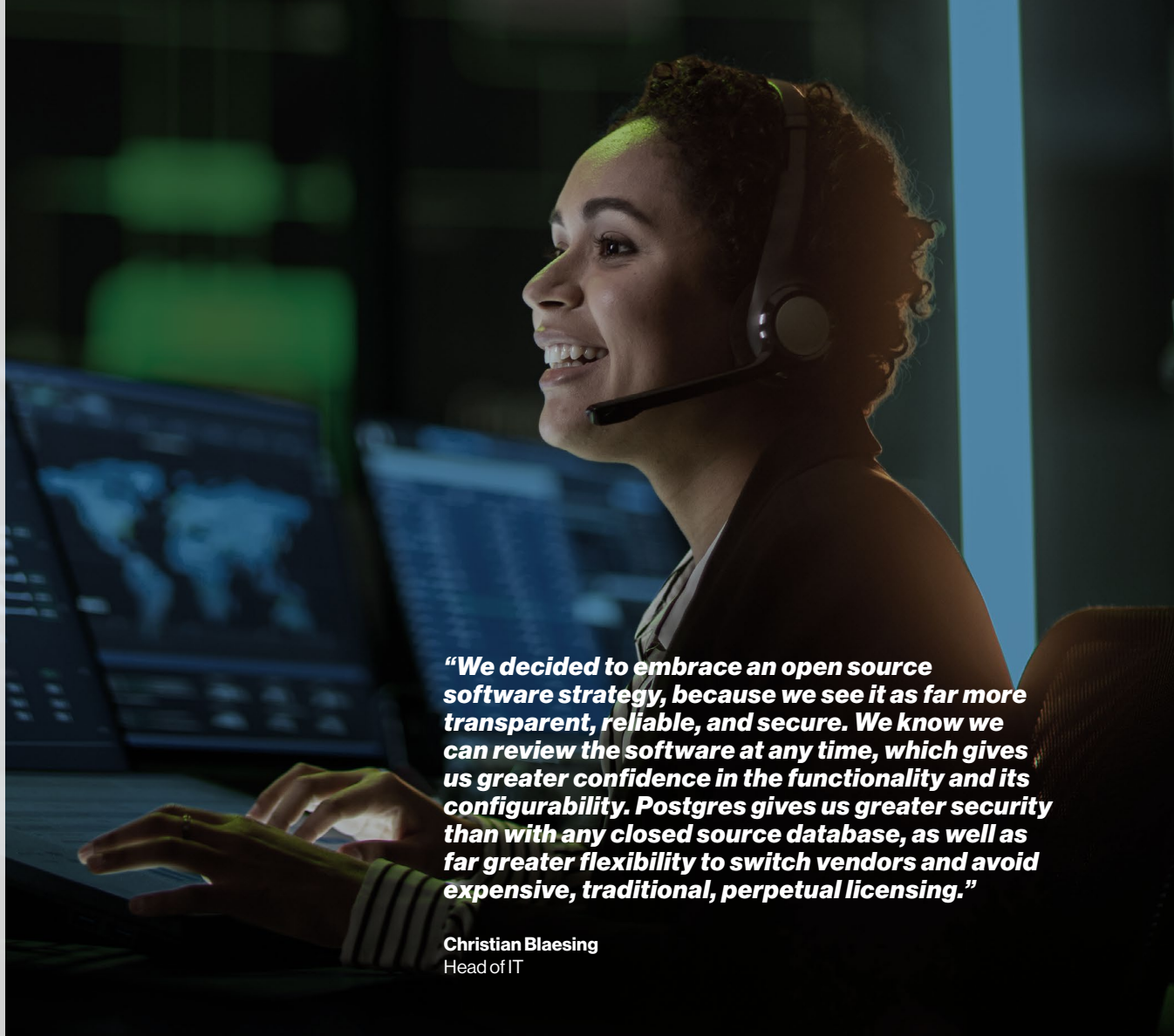
The next-generation German telecom provider telegra, which specializes in delivering call center applications to businesses, was looking to modernize its IT infrastructure for increased agility and maintain 24/7 uptime amid spiking work-from-home internet traffic during the COVID-19 pandemic. This transformation involved moving away from commercially licensed databases, such as Oracle, and adopting an open source approach in its two German data centers, providing high availability for mission-critical Postgres databases.

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 datacenter model, its web applications used a primary-failover datacenter 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 datacenters.

As part of the shift to a primary-primary datacenter 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 datacenter 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 datacenter 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 the 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 the 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 datacenter setup, providing true high availability for Postgres databases used in demanding industry verticals – such as 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 datacenters running with load balancing, which helps to 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 datacenters were to go down, they could continue to operate even in a split-brain scenario, because both datacenters 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

Gain the highest confidence in your data-intensive workloads, with up to 99.999% uptime and 5x throughput performance vs. native logical replication. This means an enhanced user experience and extended system capacity to deliver what you do best, whenever and wherever you operate. EDB delivers continuous high availability for the highest confidence in your data-intensive workloads.

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, while 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.

By adopting EPAS and EDB Postgres Distributed, telegra now has confidence that its core applications will continue to be reliable, robust, and scalable. Rather than being consumed with fixing the database and understanding its complexities, telegra teams can focus on building new functionality and better products, which has enabled them to become even more responsive to the evolving, dynamic demands of their customers.

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CUSTOMER SUCCESS STORIES

MDS Global Propels Modernization by Migrating to EDB Postgres

MDS GLOBAL

CUSTOMER: **MDS GLOBAL**

Stephen Randall
CTO

GOAL: Expand reach in telecom sector with a seamless and cost-effective Postgres migration

EDB SOLUTIONS: EDB Oracle Migration Portal and EDB Support

EDB

OVERVIEW

MDS Global embraces Postgres for cost-effective Oracle migration and modernization

With a 21-year-old billing and customer care system known as the Cloud Monetisation Platform (CMP), MDS Global identified the need for a modernization overhaul in 2016. Given an old infrastructure as the backbone of a modern application and rising development costs, the team recognized the opportunity to provide more deployment flexibility and accelerate development by embarking on a dramatic application modernization initiative: switching from DB2 to EDB Postgres.

> ***"We've experienced so many benefits that trace back to the move to Postgres. On the technological side, we have far more flexibility and functionality with each new Postgres release. We move faster and can be confident that any issues will be addressed quickly. In addition, the lower costs across both applications give us the price flexibility we need to pursue smaller firms, giving us a foundation to grow with them."***
>
> **Stephen Randall**
> CTO

Breaking down barriers with open source Postgres

As part of MDS Global's modernization effort, it embraced virtualization, which allowed CMP to run on virtually any hardware platform. The licensing costs of DB2 would have made such broad distribution prohibitively expensive. But that wasn't the only reason MDS Global decided to move to Postgres.

Tapping into the open source community and its widely available resources, the team managed the migration quickly and successfully. All things considered, it was an easy upgrade. And since going live on PostgreSQL 11, the team has performed subsequent upgrades without incident.

"In the past, our self-managed customers had to have a big team, because everything was so complex and required very specialized knowledge. Now, it's not only painless for them to get up and running on the platform; they can easily find local people with Postgres experience. The result is that our team can really focus on helping with the product rather than the infrastructure."

Stephen Randall
CTO

Seamlessly expanding modernization efforts

With the success of CMP's migration to Postgres, the team identified a second migration project related to MDS Global's Spend Analyser offering. Spend Analyser provides a telecommunication company's B2B customers with valuable insights, allowing them to capitalize on that knowledge to save costs.

As MDS Global gained traction in emerging markets, those customers expressed a great deal of interest in what Spend Analyser could do for them but often balked at the cost of running it on the Oracle database on which it was architected. This migration was no easy task, because a significant position of Spend Analyser had been written to Oracle's proprietary specifications.

With the help of EDB's pre-sales and engineering teams, MDS Global was not only able to perform a seamless migration but also to do so cost-effectively, while saving customers time and money that would have previously been incurred with an Oracle-based infrastructure.

> ***"We've been so impressed with how quickly things moved, and the quality answers we got from real people supporting us that got to the nub of a problem. EDB gives us support at a consultative level rather than a ticket level. That really showed in how we had the same contact person we worked directly with whenever we had a challenge, rather than having to go through a generic help desk all the time."***

Stephen Randall
CTO

Postgres migrations unlock flexibility for the future

Cost advantages are only part of the migration benefits. As MDS Global increasingly targeted smaller organizations with more limited budgets, the company expected an uptick in customers choosing MDS Global's cloud-based offering rather than its on-premises one.

Due to the migration, MDS Global's developers can now easily spin up new environments—complete with the database and the data—for development and testing. The development team is more likely to identify errors early and to gain comprehensive insights into the impact of changes.

> ***"We have so much more flexibility now. We effectively have no barriers, and the team can experiment, innovate, and generally move faster. We can get more done because, for the same budget, we now have more resources and money to spend on functionality as a direct result of the migration."***
>
> **Stephen Randall**
> CTO

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

Linxup Modernizes and Eliminates Downtime by Moving to EDB Postgres in the Cloud

linxup

CUSTOMER: **LINXUP**

EDB customer since November 2020

Adam LaMore
Vice President of Engineering

GOAL: Break free from legacy tech with a zero-downtime migration to Postgres in the cloud

EDB SOLUTION: EDB Postgres Distributed

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OVERVIEW

Linxup delivers reliability with a modern database built to scale

Linxup, a location-based fleet and vehicle tracking solution, was rapidly growing its market share of small to medium-sized businesses in the GPS tracking device market. But its database couldn't sustain the levels of forecasted demand much longer. By moving away from legacy systems to a modern, enterprise-grade database—EDB Postgres—Linxup was able to achieve scalability in the cloud, with zero downtime.

> ***"Reliability is critical to our reputation. If our customers don't think that Linxup will be able to serve them all the time, they're going to find an alternative."***
>
> **Adam LaMore**
> Vice President of Engineering

More data, more problems

Linxup customers get pinpoint location awareness of their vehicles at all times. In fact, more than 90% of Linxup's data is time-series data, collected constantly from its hundreds of thousands of tracking devices and kept in production for two years.

Linxup was processing a whopping 11 TBs of data and, as the company grew its customer base, the rate and volume of data capture exponentially increased. The team was continuously dealing with the write scalability and maintenance issues of their database, running an outdated version of PostgreSQL because an upgrade would have caused days of downtime—unacceptable for their customers. Linxup systems were bursting at the seams, and patched together with temporary solutions fire drill after fire drill.

The customer base and the future of the business were at risk.

Achieving enterprise-grade scalability and security, with zero downtime

Linxup took action and decided to work with EDB, the leader in Postgres for enterprises. Together, the Linxup and EDB teams worked through the challenges and came to a sustainable solution in EDB Postgres Distributed.

With the enterprise-grade solution in place, Linxup was finally upgraded to the latest Postgres version—without any downtime. Zero downtime was critical for Linxup's customers and ultimately all of the people it services.. From retail delivery trucks providing accurate ETAs to emergency response vehicles taking the fastest routes possible, the impact of 200,000 businesses continuously tracking their vehicles is immense.

The upgrade combined with EDB's new features led to a dramatic improvement in the application's horizontal write scalability.

> ***"With write scalability issues solved for the foreseeable future, we're able to keep the database up to date with the latest version of PostgreSQL , without taking the database offline. We also have a much more robust and seamless disaster recovery setup than before."***
>
> **Adam LaMore**
> Vice President of Engineering

Geo-distributed, extreme high availability

Ensure that data remains up to date and complete even when disruptions occur with geo-distributed, extreme high availability. Deploy multi-region clusters with five-nines availability to support the most demanding applications—anywhere, any time.

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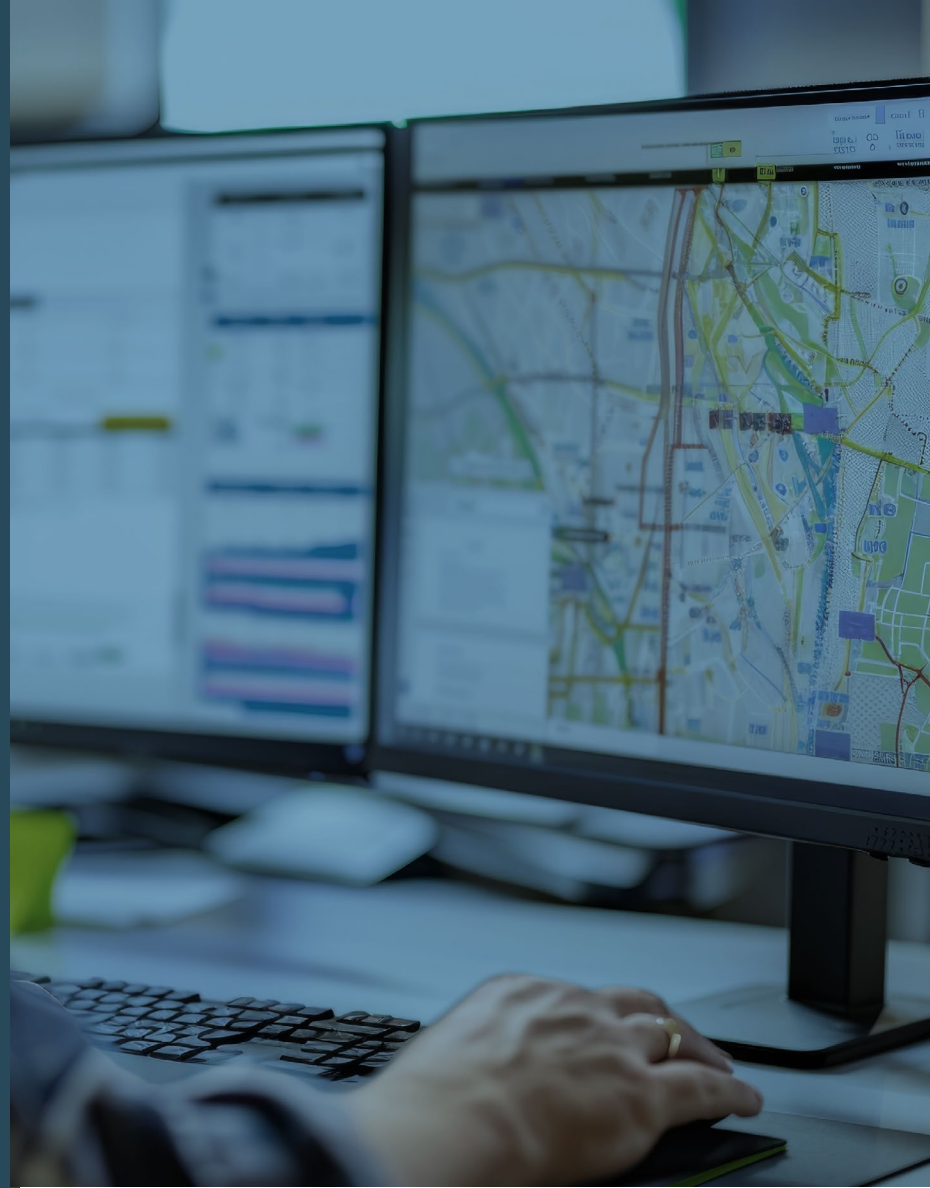

> ***"The architecture enables us to reduce application changes while setting ourselves up for any future horizontal scalability needs."***

Adam LaMore
Vice President of Engineering

EDB

Catapulting into the future with full cloud agility

Next, Linxup worked with EDB to move to a full cloud approach—without the hybrid-cloud stepping stone. Originally an end goal years away, the full cloud strategy was accelerated by EDB's unique capabilities. Linxup was confident in the full potential of the cloud and knew that EDB would keep the database performing to the company's standards over the course of the migration. In the end, Linxup boasted a fully cloud PostgreSQL infrastructure. Instead of spending time and talent on fixing technical issues and cleaning up data, the team could now focus on higher-value work—good for morale and for business.

Currently, EDB's team also helps manage and maintain the database on a day-to-day level, alerting Linxup of unusual activity, maintenance needs, and low disk space, for example. That partnership has further freed the development and operations team to focus on customer-facing advancements.

Without legacy systems holding it back, and with the power of EDB, Linxup's potential for growth and innovation was unleashed, causing a ripple effect that benefited its 200,000 customers and beyond.

> ***"EDB's solution has been working exactly as we had hoped. From a performance perspective, we haven't had any of those bad days that we used to have, when things got overloaded and we were scrambling to find a solution. Performance has remained consistent, reliability has improved, and we now have a database that can support all our future growth plans."***

Adam LaMore
Vice President of Engineering

BENEFITS

EDB Postgres AI for telecommunications customers

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

Open source PostgreSQL on its own has proven to be transformational for many telecommunications organizations. But by combining the synergy of AI with Postgres, you can increase opportunity and innovation. EDB Postgres AI not only delivers access to enterprise-grade Postgres tools that support extreme high availability, unmatched Oracle compatibility, increased security, and mission-critical tasks. It also powers your 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 tool kit for supporting AI applications using a single data layer, plus AI-driven copilots and automation to provide solutions for nonexpert users.

The fastest on-ramp

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 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.

EDB

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 TELECOMMUNICATIONS BUSINESS BY TRANSFORMING YOUR DATABASE

As you've seen in these customer stories, with EDB as their support partner, telecommunications 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.

Take Postgres workloads from experimental to essential with hardened security, support, and compliance tools to help you standardize with Postgres across your enterprise. Scale to meet the needs of a global user base with a database that can scale with you. Discover how EDB can help you build your future on Postgres. Visit EDB or talk to your account representative today.

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