



EDB Postgres® AI

for enterprise-grade Postgres

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Fed/Public Sector Leaders
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First Poll





WHO WE ARE

A leading contributor to PostgreSQL, delivering an open, sovereign, AI and Data platform.



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OUR MISSION

EDB will deliver the #1 PostgreSQL® data and AI platform for data-driven, AI-infused, intelligent applications.

OUR PEOPLE

850 experts in 30 countries serving 1,700 customers across the globe and mostly in highly regulated industries



OPEN-SOURCE

We are the leading commercial contributor to PostgreSQL with over 30% of the overall score for PostgreSQL Vitality

OUR PARTNERS

CRN AI and CRN top 100 big data company with over 200 major partners globally

37% BUILD THEIR PLATFORMS IN POSTGRES



Across the globe,
1 billion credit
card transactions
take place each day
on Postgres®.



The national
rail system for
1.4 billion Indian
citizens runs on
Postgres®.



The future health of
people around the world
depends on Postgres®.



The health of 1 in 6 people
around the world relies on
imaging with Postgres®.



Postgres® enables migration from
legacy systems to the new world.



The sovereignty of data
is protected by Postgres®.



4B fly on the wings
of Postgres® each year.



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EDB named a Leader in The Forrester Wave™



30X

FASTER ANALYTICS

Complex queries run directly on operational data in Postgres —no ETL lag, no separate warehouse.

18X

MORE EFFICIENT STORAGE

Lakehouse integration with object storage costs a fraction of all-SSD purpose-built stores.

ZERO

VENDOR LOCK-IN

Open Postgres extensions replace proprietary single-purpose engines, one at a time.

ONE

SYSTEM, EVERY MODEL

SQL, vector, JSON, time-series, and key-value —unified instead of sharded across tools.

Forrester evaluated 14 suppliers —only these four were named Leaders.

EDB — LEADER

ORACLE

MICROSOFT

MONGODB

Where EDB scored the highest

VISION

INNOVATION

ROADMAP

PARTNER
ECOSYSTEM

High performance data infrastructure from trusted experts, with better cost-efficiency.

Up to **5X**

Throughput efficiency, with performance fine-tuning

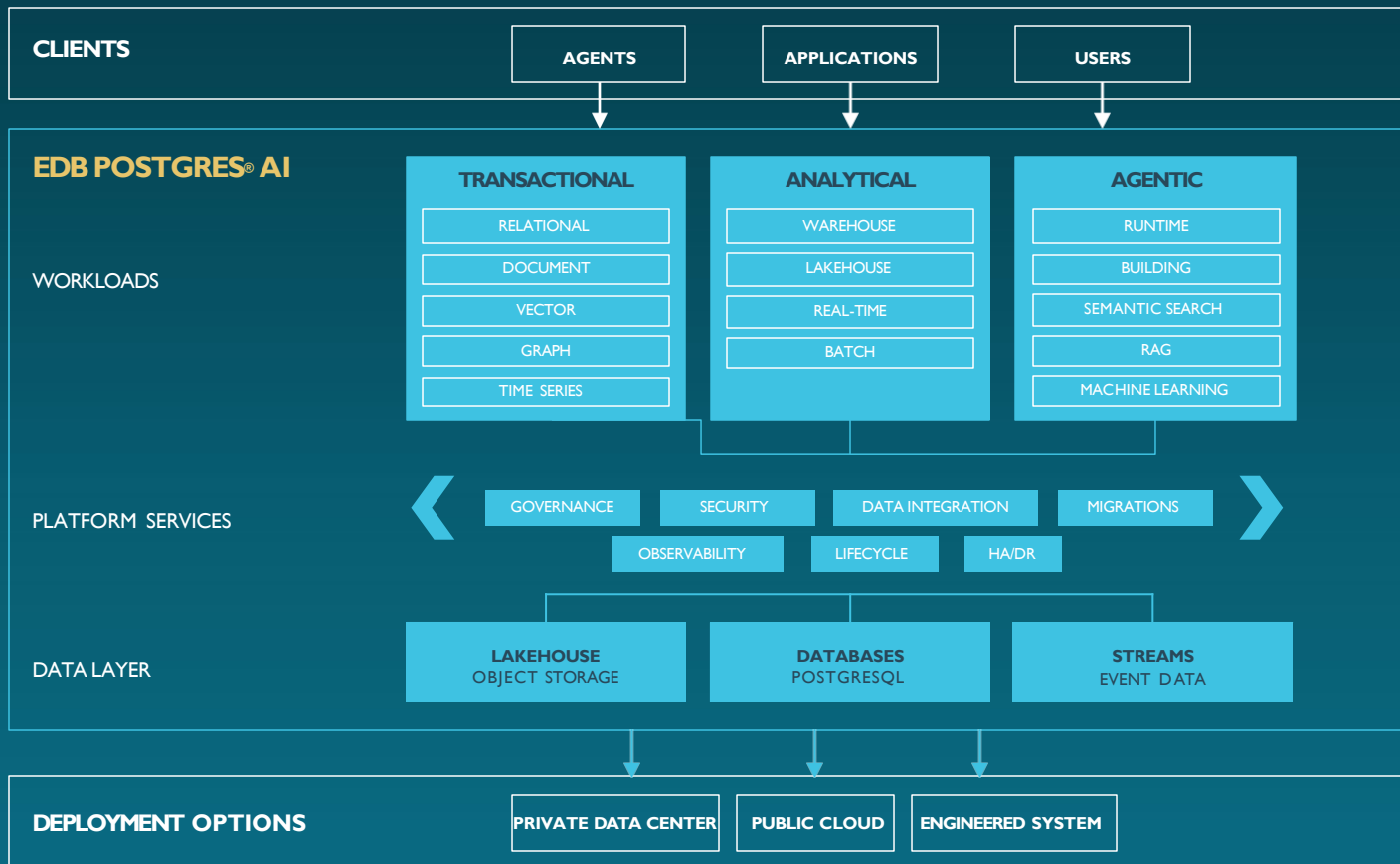
99.999%

Availability with geo-distributed, active/active clusters

80%

Reduced TCO versus traditional commercial databases





Run enterprise-grade Postgres with EDB Postgres AI

Take Postgres workloads from experimental to essential



▪ Safe, secure, supported

- Enterprise security
 - Transparent data encryption
 - Observability
 - Access management
- Compliance readiness
 - GDPR, PCI DSS, SOC2
- 24/7/365 expert support



▪ Day 2 ready

- The highest availability (up to 99.999% uptime)
- Up to 5X throughput efficiency
- Intelligent observability
- Performance tuning



▪ Automation

- Fully managed cloud services (AWS, Azure, GCP)
- Kubernetes tooling
- Common set of interfaces for hybrid and multi-cloud environments



Feature overview



- Security and compliance suite

- Advanced security features including transparent data encryption, audit trail, privilege analysis, and firewall. SOC2, GDPR, and PCI DSS readiness.



- Distributed, high availability PostgreSQL

- Deploy in geo-distributed active/active clusters with EDB PostgreSQL Distributed, to provide the highest availability (up to 99.999% uptime) with 5X throughput efficiency versus native logical replication.



- Event support and lifecycle management

- Vector data stored in EDB PostgreSQL AI can be indexed using the database's indexing capabilities, enabling high-performance similarity searches and queries on vector embeddings.



- PostgreSQL high performance

- EDB has fine-tuned PostgreSQL with features like Wait States, SQL Profiler, and Index Advisor that drive up to 5X performance.



Second Poll



Use Cases



US NAVY: KEEPING CRITICAL SERVICES AFLOAT ON EDB POSTGRES



How the US Navy exited Oracle, standardized fleet-wide on EDB Postgres, and set course for a cloud-native, self-healing future.

THE CHALLENGE

Esri GIS —core to the Navy's mapping & data analysis —historically ran only on Oracle. The hot-standby high-availability it required often doubled anticipated cost. The Navy needed to cut IT spend, accelerate to cloud, and standardize one data-analytics database across the entire fleet.

REQUIREMENTS

Cost · Usability · Performance · Reliability · Secure

THE SOLUTION

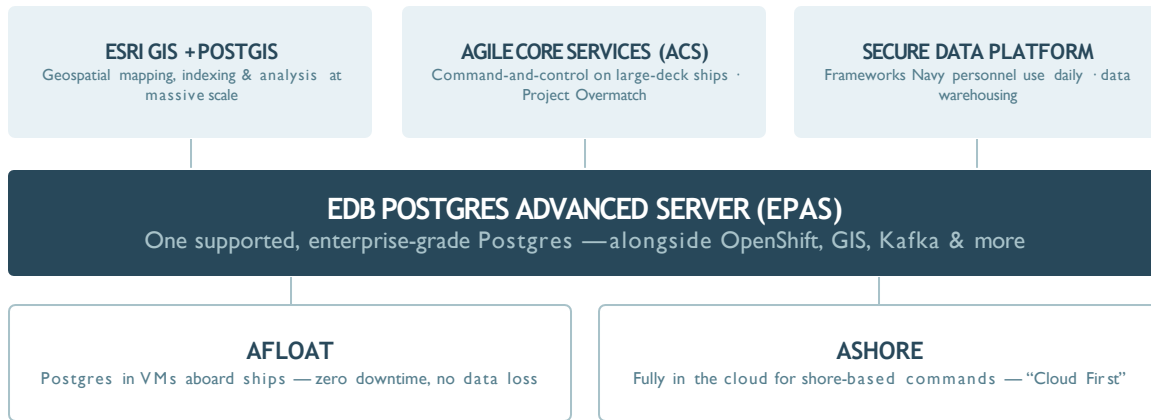
EDB Postgres Advanced Server (EPAS): supported, enterprise-grade Postgres —selected ~2010 when Esri added Postgres support, and in service ever since.

MILLIONS

saved vs Oracle IT spend

FLEET-WIDE

one standard data platform



THE MISSION AHEAD

Containerize everything

All new Project Overmatch apps must be containerized, then pass a rigid fleet approval process.

Self-healing, zero downtime

EDB Postgres for Kubernetes brings immediate scaling, recovery & self-maintenance in every facet.

AI/ML for ease of use

Underway, sailors can't call support—systems must self-heal for lightly trained users.

RESULTS Millions saved vs Oracle —with the move to cloud driving modernization, flexibility & scalability across operational missions worldwide.

USDA FOREST SERVICE: A TRIUMPHANT ORACLE-TO-EPAS MIGRATION



How the steward of 600M+ acres of US forestland beat a hard Esri deadline and modernized its massive geodatabase with EDB.

THE CHALLENGE

Mission-critical Esri geodatabases — operate as “geodatabase as a service” for Forest Service units — lived inside Oracle schemas until Esri dropped support for that model. With Oracle costs “incredibly high” and rising 10–15% a year, migration had to be low cost, low impact, and be able to reuse existing PL/SQL code.

REQUIREMENTS

Support · Business impact · Lowest cost · Full migration

THE SOLUTION

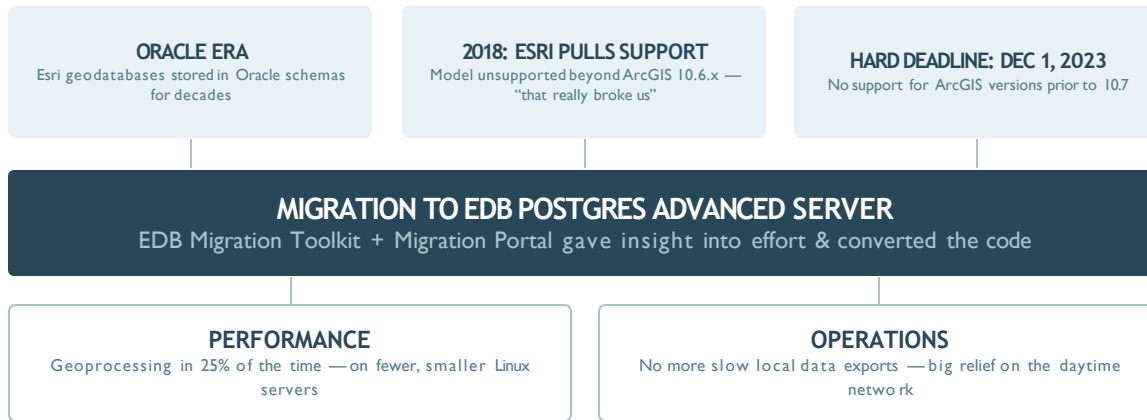
EDB Postgres Advanced Server (EPAS): deep Oracle compatibility, ArcGIS geodatabases in Postgres via PostGIS, plus full EDB support — “the obvious choice.”

>70%

performance improvement

<30%

of the cost of Oracle



THE ROAD AHEAD

Full Oracle exit

Savings fully realized once current Oracle licenses expire — part of a larger agency effort to leave Oracle.

Migration Portal effectiveness

Millions of PL/SQL lines shouldn't deter you; no Oracle code found too sophisticated to replicate in EPAS.

Low-risk to explore

Cheap to build a replica of your Oracle system now, cancel anytime — in three words: “Don't be afraid.”

RESULTS Deadline beaten easily — “an actual, triumphant success” — with >70% better performance at less than 30% of the cost.



FBI: PROTECTING THE GOVERNMENT'S MOST SENSITIVE DATA WITH EDB

How native Oracle compatibility revived the FBI's stalled cloud modernization —moving mission-critical apps to Postgres on AWS.

THE CHALLENGE

The FBI collects, analyzes & protects high-stakes data on terrorism, cyber attacks & organized crime —while cyber threats surge across government. Key apps for case management & background checks sat on cumbersome Oracle; exorbitant, rigid licensing fees made moving them —and future costs —prohibitively expensive.

REQUIREMENTS

Taxpayer spend · No recoding · Security · Downtime

THE SOLUTION

EDB Postgres Advanced Server (EPAS): Postgres “looks and feels just like Oracle” —so no applications had to be recoded on the way to AWS.

30,000+

federal cyber incidents,
FY2022

ZERO

data loss during migration

SURGING THREATS

97% of orgs hit by rising threats · 30K+ federal incidents in FY2022

CUMBERSOME ORACLE

Case management & background-check apps locked into rigid infrastructure

SKY-HIGH FEES

Exorbitant licensing stalled migration & inflated future database costs

MIGRATION TO EDB POSTGRES ADVANCED SERVER ON AWS CLOUD

Easy & cost-effective · no application recoding · minimal disruption · no data loss

SECURITY

Critical data stayed secure — protected against threats & disruptions, with tailored controls

FREEDOM

Vendor lock-in reduced — no inflexible software or frustrating licensing costs

WHAT'S NEXT

Taxpayer accountability

Every expenditure must be essential & approved — an easy, cost-effective migration fits the mandate.

Tailored security in AWS

More control over data & infrastructure enables hardened networks, access controls & custom measures.

Built to evolve

Flexibility to adopt new technologies —with EDB Postgres AI's secure, sovereign data & AI platform.

RESULTS An easy, cost-effective migration —critical data secure and protected, vendor lock-in reduced, and the flexibility to evolve alongside new technologies.

STSCI: PETABYTE-SCALE MISSION ANALYTICS ON WAREHOUSEPG

How the home of Hubble, JWST & the MAST archive could unify catalog science, telemetry & AI-driven discovery on one open, sovereign MPP warehouse.

THE OPPORTUNITY

STScI's MAST archive curates 20+ missions and is among the largest astronomical databases anywhere. JWST downlinks 50+ GB/day (vs Hubble's 1–2 GB) — and Roman (2027) will add ~1 TB/day. Cross matching, time-series & telemetry analytics demand petabyte-scale SQL at global concurrency — on open infrastructure.

REQUIREMENTS

Petabyte scale · **High concurrency** · **Open source** · **Predictable costs** · **Hybrid cloud** · **Zero latency**

THE PROPOSED SOLUTION

EDB Postgres AI for WarehousePG: an Apache 2.0, Postgres-based MPP warehouse (Greenplum-compatible) uniting BI, ML, vector search & real-time streaming.

~1 TB/DAY

Roman downlink from 2027

UP TO 58%

lower warehouse TCO

MISSION DOWNLINK
JWST 50+ GB/day · Roman ~1 TB/day —
streamed in near-real-time

MAST CATALOGS
Hubble Source Catalog (100M+
measurements), TESS, Gaia cross-match
tables

ENGINEERING TELEMETRY
Spacecraft & instrument health · calibration
pipeline metadata

EDB POSTGRES AI FOR WAREHOUSEPG — MPP CLUSTER
Coordinator + parallel Postgres across 100s nodes · mirror & standby coordinator HA · in-database ML

SCIENCE
Sky-wide SQL cross-matching & time-series in minutes · vector
similarity over spectra/image embeddings

OPERATIONS
High-concurrency archive queries for researchers worldwide ·
observability + Barman-based disaster recovery

THE WAREHOUSEPG FIT

Open & sovereign

Apache 2.0 under EDB stewardship —
no lock-in or consumption pricing on
taxpayer-funded science.

Hybrid by design

Segments on-prem in Baltimore or
beside MAST's public datasets on
AWS — scale out node by node.

AI-ready archive

Embeddings + in-database ML enable
anomaly detection & cross-mission
similarity search from notebooks.

HYPOTHETICAL OUTCOME One open, petabyte-scale Postgres warehouse for every mission's data — faster discovery, predictable economics, full sovereignty.

What does Future State look like



- Data Sovereignty is National Security

- All about agency control - Mission First, Open Foundation, Edge Resilience, and Fiscal & AI Ready



- AI Factory

- Turnkey AI Factory straight from the data layer - reignite stalled AI projects due to integration complexity, enterprise and compliant ready tools, with stability and observability for governance



- Hybrid Management

- Unify your entire Postgres estate - on-prem, hybrid, cloud - in a single control plane. Allows you to deploy Postgres Databases 10x faster while cutting workload costs by 40%.



- Converged Analytics

- Eliminate ETL complexity and get up to 90x faster query performance across all of your data - operational, lakehouse, warehouse - through one governed interface. This creates agent-ready foundations where both humans and autonomous agents can act on live data at interactive speeds.



Third Poll



What to do now

- I. Reach out to your technology advisor and/or Carahsoft representative
- I. Set up a time to discuss how EDB can help:
 - Address your current business concerns
 - Explore ways in which EDB can enhance your current Postgres estate
 - Discuss your Hybrid Cloud data strategy
 - Ensure that you are regulatory compliant



Thank you

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Appendix



What is EDB Postgres AI?

An intelligent platform for unified management of transactional, analytical, and AI workloads —powered by Postgres.



▪ The highest confidence

- Up to 99.999% availability.
- Up to 5X throughput performance.
- 30X average faster analytical queries.



▪ The deepest intelligence

- Complete toolkit for AI applications using a single data layer.
- AI-driven copilots and automation to provide solutions for non-experts.



▪ The fastest onramp

- The most comprehensive Oracle compatibility for Postgres.
- Suite of migration tooling to onboard in days versus months or years.



Challenges for Postgres in the enterprise

You can't settle for "good enough" when it comes to mission critical applications



▪ Security and compliance

- Out-of-the-box PostgreSQL lacks enterprise-grade requirements:
 - Data encryption
 - Compliance readiness
 - Observability
 - Access management
 - Query performance enhancement
 - Professional support



▪ Tier 1 app requirements

- Infrastructure challenges threaten the integrity and uptime of your critical apps
 - Cloud failures
 - Latency, e.g. from data localization issues
 - Data loss, e.g. from complex replication patterns

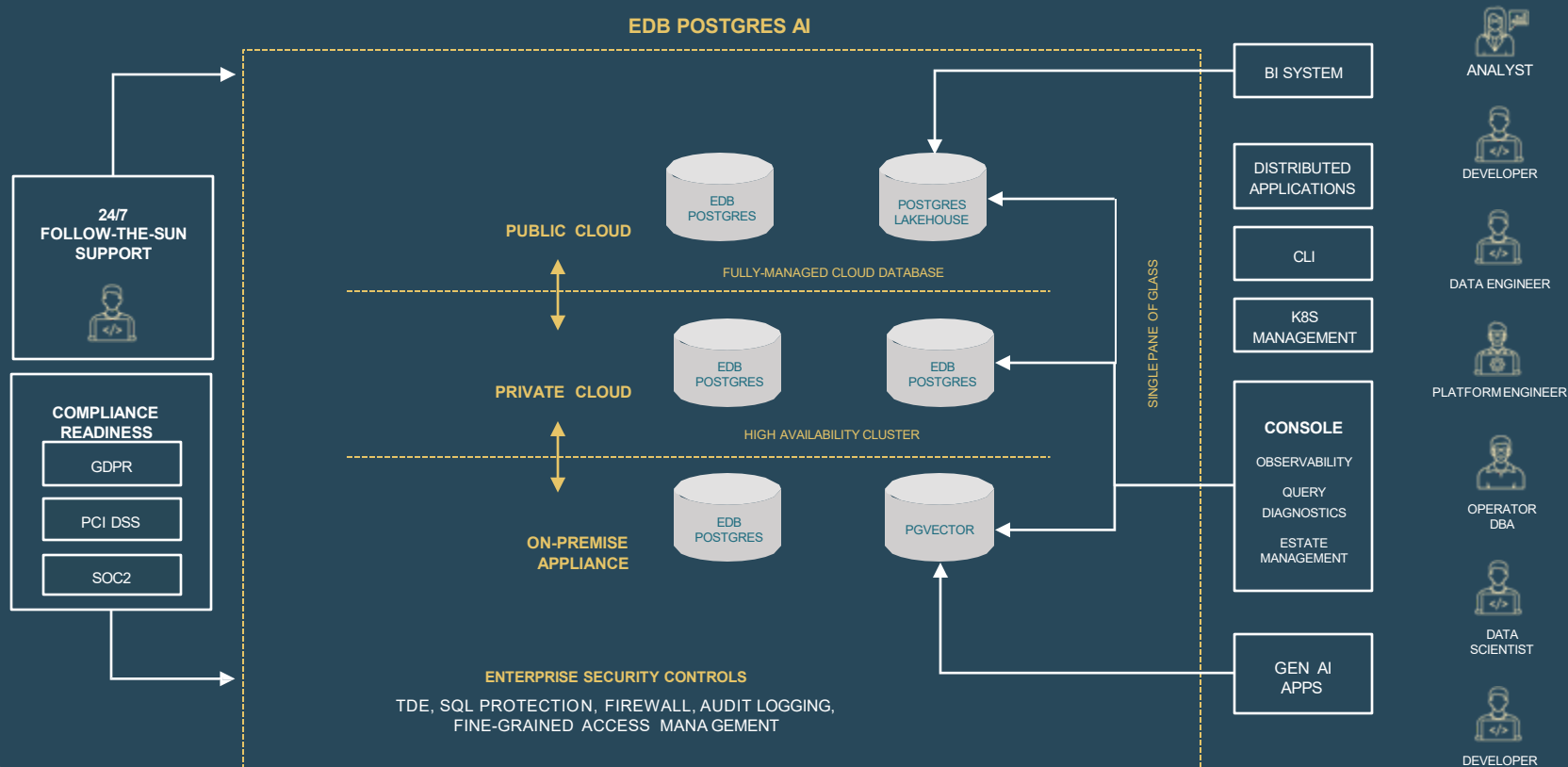


▪ Complex management

- Operational challenges result from a lack of "Day 2" readiness including:
 - Cloud-native tools
 - Seamless CI/CD integration
 - Versatile deployment choices
 - Managed services



EDB Postgres AI for Enterprise-grade Postgres



Professional services & support for always-on Postgres



Professional services across the Postgres lifecycle

- Strategy.
- Operations and implementation.
- Customized services.



Training

- Quickly enable customers and partners on Postgres.
- Instructor-led, On-demand, and Certification options.



Technical account management

- Assigned technical expert to proactively advise on EDB solutions.



Remote DBA

- Maximize Postgres performance and uptime.
- Hands-on Postgres support.
- Proactive remediation.

