

# AVOIDING HIGH ORACLE DBMS COSTS WITH EDB POSTGRES



An EDB White Paper  
For CIOs and IT Directors

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## **Disclaimer**

The following is intended as an outline of EDB’s general product direction. It is intended for informational purposes only, and it should not be relied upon in making purchasing decisions. This information may not be incorporated into

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# INTRODUCTION

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In today's highly competitive marketplace, companies need every available IT dollar applied to innovative new applications to drive customer engagement and other mission-critical initiatives. Technology is providing cost-effective alternatives to the status quo with one of the biggest untapped opportunities

in IT infrastructures—the database management system (DBMS). Moving to open source-based databases, like EDB Postgres Advanced Server, enables savings of 70% to 80%, freeing millions of dollars for these new projects.

## POSTGRES – THE WORLD'S MOST ADVANCED OPEN SOURCE DATABASE

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Adopted by a host of leading companies including Facebook, Microsoft, and Yahoo, Postgres is a proven open source database technology that can handle the most demanding use cases. Postgres has the backing of 25 years of development refinements and was sparked by the same technological revolution as Oracle's DBMS.

Both were born out of Edgar Codd's groundbreaking 1970s research paper that served as the foundation for relational

database management. One became the proprietary DBMS offered by Oracle, another – Postgres – was developed by a small group of Massachusetts Institute of Technology (MIT) scientists dedicated to advancing the field. Now in its third decade of development, Postgres has reached a tipping point, making it not only a strong alternative to Oracle, but also a preferred choice by the most influential technology companies in the world.

## DRAMATIC COST AVOIDANCE

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Postgres represents a natural progression in open source software (OSS) adoption. Over the past decade, IT organizations have gained substantial experience from deployments of OSS throughout their infrastructure stacks. Most organizations have been successfully running some form of Linux, JBoss, KVM, or other OSS software in their data centers for years, and are now looking to adopt open source alternatives for their databases as well.

Although the most sensitive layer of the infrastructure stack, the database layer has the potential for the greatest cost savings and strategic advantages. For example, one Oracle license alone lists at \$47,500 per processor core (without

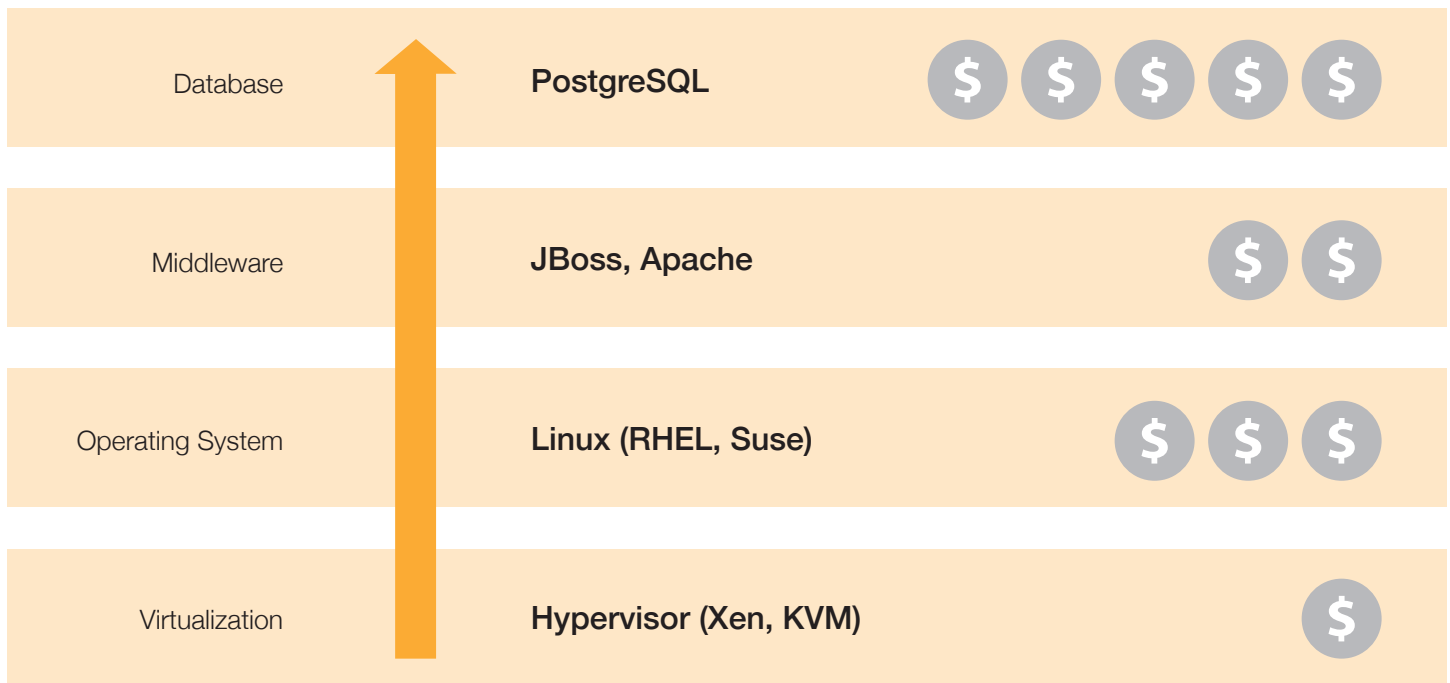
any add-on features) with annual operating expenses equal to 22% of the total license costs. For a large installation using many processors, the annual expense from Oracle maintenance costs alone can easily be in the six- to seven-figure range.

Additionally, Oracle uses a variety of business practices to lock enterprises in and raise prices. An example of this is Oracle's latest SE2 release that costs 20% more than SE1 while providing 50% less capacity. On top of that, ongoing maintenance fees have increased to 22% of license cost. What does this mean for an average Oracle customer running SE on a 4-socket server using 8-core processors per socket?

Because an Oracle SE2 maximum deployment is a 2-socket server, the customer must pay an astonishing 4,000% cost increase to move to Enterprise Edition, or buy a second database server, buy an additional SE2 license, and pay twice the ongoing maintenance fees. This is in addition to the new hardware and engineering costs to separate the

existing deployment into two servers.

Implementing Postgres is a wise alternative to Oracle's business practices and price increases. Not only does this reduce capital and operating expenses, but IT vendor flexibility also increases.



# INTRODUCTION TO EDB POSTGRES

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EDB combines all of the benefits of Postgres with the commercial dependability, resources, and support companies need to run their enterprise-class applications. Based in Bedford, MA, EDB is the leading worldwide provider of enterprise-class Postgres and database compatibility software and services. Used by thousands of businesses and government customers globally, EDB Postgres delivers the industry's best price-performance value in a relational database. Employing some of the most innovative members of the Postgres community, EDB builds upon the 25-plus years of Postgres development to provide companies a proven, high performance, secure, and feature-rich alternative to costly commercial databases.

EDB Postgres offers the choice of a platform based on the open source PostgreSQL DBMS in the EDB Postgres Standard subscription or an enhanced version of Postgres, EDB Postgres Advanced Server, which includes all the latest features of Postgres with Oracle compatibility; added security features; better performance capabilities; and additional developer and DBA features. The EDB Postgres subscriptions also include sophisticated monitoring, management, and replication tools; along with the support, training, and professional services companies require for successful deployments. EDB Postgres Advanced Server DBMS, included with the EDB Postgres Enterprise subscription, adds Oracle PL-SQL commands and syntax integrated directly into the Postgres codebase to enable companies to quickly and easily migrate existing applications off of Oracle databases and onto EDB Postgres Advanced Server with little to no modifications. In addition, companies can continue to use their DBAs' existing Oracle skills without re-training and avoid other change management issues.

In 2014, almost one million new pieces of malware were released each day. EDB Postgres Advanced Server expands on the security benefits of Postgres with features, such as protection for SQL injection attacks and row-level security enhancements. As one of the world's most advanced databases, EDB Postgres Advanced Server includes additional proprietary features built into the software, including auditing, partitioning, and Virtual Private Database.

With EDB, there are no up-front license fees, no penalties for making changes, no restrictions on installation sizes and honest virtualization pricing. Simply pay for what you use and grow as you go.

A realistic example of the cost avoidance benefits offered by EDB Postgres Enterprise is in the table below. This example compares licensing and vendor support costs between Oracle and EDB Postgres Enterprise for a typical 2 socket/8 cores with an x86 processor. Given the size and scope of many IT budgets, these cost avoidance metrics can be staggering in their magnitude.

EDB customers have had dramatic savings after transitioning from Oracle. In one TCO/ROI Analysis from Alinean, Inc., one EDB customer realized \$1.7 million in savings over three years by using EDB Postgres Enterprise instead of Oracle. This represented a return on investment of 271% and an internal rate of return of 101%, with a payback period of just one year.

**No CAPEX • Annual OPEX reduction of 90% • 3 YR TCO cost savings of 96%**

	Oracle Enterprise Edition	EDB Postgres Enterprise Edition
	8 Cores x86 Processors	8 Cores x86 Processors
Database	\$47,500	Included in subscription
Partitioning	\$11,500	Included
Data Guard	\$11,500	Included
Diagnostics	\$5,000	Included
Total License Fee per Core	\$75,000	Included in Subscription
<b>Total License Fee per Server (CapEx)(0.5 core factor)</b>	<b>\$302,000</b>	<b>\$0</b>
Annual Support / Subscription Cost per Core	22% of License Fee	\$1,750 per core
Annual Support / Maintenance Cost per Server (OpEx)	\$66,440	\$14,000
<b>Total 3 Year Cost License and Support</b>	<b>\$501,320</b>	<b>\$42,000</b>

*Note: All prices are approximate totals based on published information obtained from vendors.*

# MIGRATE IN THE RIGHT DIRECTION

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Migration is the first step in reducing Oracle costs. Many Oracle customers are preparing for another kind of migration —from the 10g or 11i to the 12c platform. Rather than performing a potentially high-cost migration between like platforms, enterprises should consider migrating toward the open source alternative: EDB Postgres Enterprise which includes the EDB Postgres Advanced Server DBMS, management, migration and integration tools, and 24x7

global support. EDB and its partners also provide professional services, training, developer and DBA certifications and additional solutions and services to ensure a fast path to value. With a proven track record of success in migrating Oracle databases, EnterpriseDB has vast experience and expertise in guiding organizations through the transition — minimizing impact while maximizing cost savings.

# IN THE FIELD: CUSTOMER SUCCESS

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Many companies are currently looking at alternative platforms to serve their database needs. EDB has extensive experience in database management, having served organizations around the world in the financial, entertainment, telecom, government, etc. EDB worked with a financial company that

operates in 12 locations worldwide and supports more than 16 million trades per day. Because of the aggressive growth of the database, the company migrated from the open source version of PostgreSQL to EDB Postgres Enterprise, which includes the EDB Postgres Advanced Server DBMS.

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IN ORDER TO PROVIDE OUR CLIENTS WITH QUALITY AND IN-TIME SERVICE DELIVERY, IT IS CRUCIAL FOR US THAT WE ENSURE HIGH AVAILABILITY AND CONTINUITY FOR OUR APPLICATIONS. OUR APPLICATIONS HAVE A 99.97% HIGH AVAILABILITY REQUIREMENT. CONTINUING TO WORK WITH THE COMMUNITY VERSION OF POSTGRES WITHOUT THE PROPER SUPPORT MODEL WAS NOT AN OPTION. IN ADDITION TO SUPPORT, THERE ARE THINGS EDB POSTGRES ADVANCED SERVER OFFERED THAT AREN'T AVAILABLE IN THE COMMUNITY VERSION, SUCH AS MONITORING, TOOLING AND COMPATIBILITY FOR ORACLE.

PIETER VAN TOL

*EUROPEAN CHIEF TECHNOLOGY OFFICER*

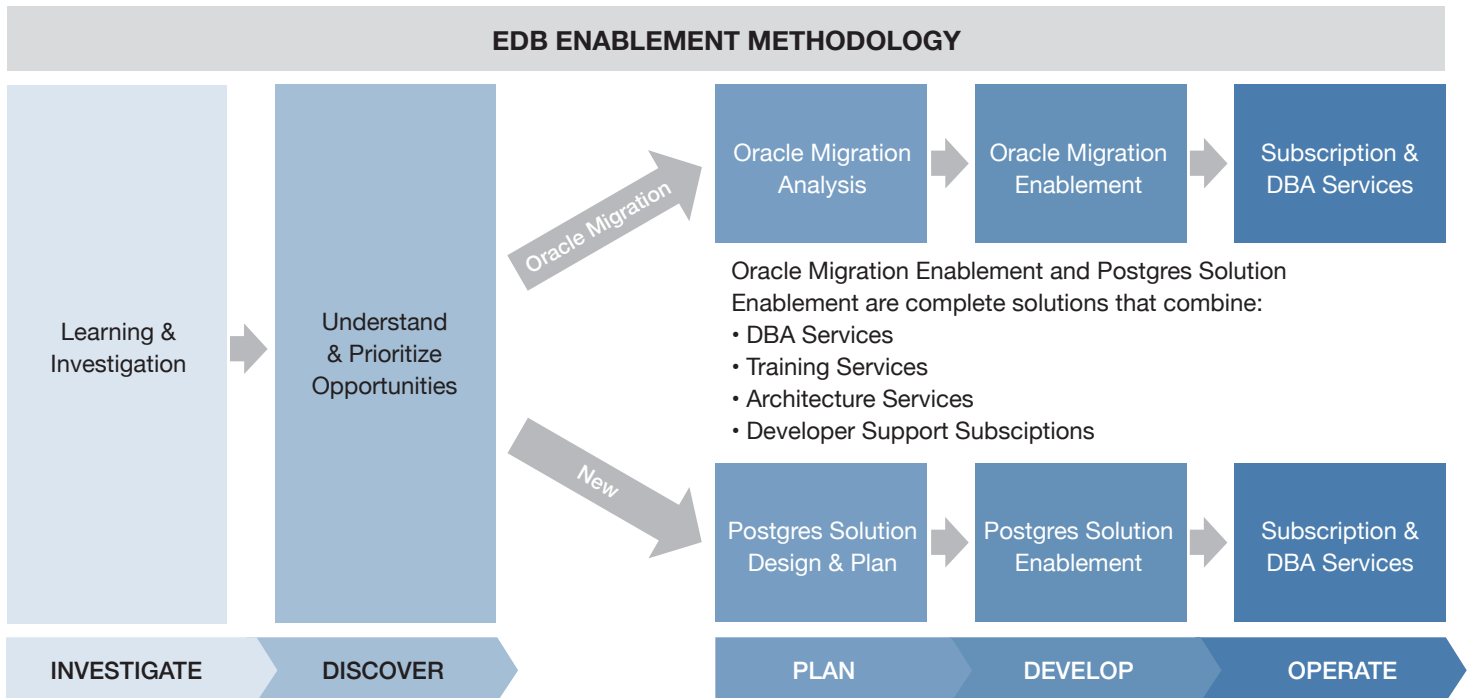
*ABN AMRO CLEARING BANK'S LONDON BRANCH*

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# DETERMINING YOUR BEST PATH FORWARD

The first steps in determining your best path forward is to learn more about Postgres, and then assess the fit for your company's needs. EDB offers a variety of research information, training, assessment tools, and transition workshops to assist you in your transition. Once your needs have been defined and the relevant Postgres opportunities

identified, EDB can also work with you to create a transition plan, and then assist you with the technical requirements for your migration or development of new applications onto Postgres. An outline of EDB's typical enablement methodology is shown below.



## CONCLUSION: THE OPPORTUNITY IS NOW

Company budgets are tight, but business leaders are determined not to let their missions suffer. Open source database management software, like Postgres, presents a unique opportunity for companies to meet their mission needs while significantly reducing their operating costs. Implementing a solution, such as EDB Postgres Enterprise, provides Oracle compatibility along with added security, performance and tooling capabilities.

EDB enables companies to realize the cost and performance

benefits of Postgres by providing the additional capabilities, support, training, and professional services that companies need to operate in today's challenging environments. With over 3,000 enterprise and government customers, EDB provides companies with the confidence of a world-class database solution at a fraction of the cost. By using EDB Postgres Advanced Server, companies can reduce spending on expensive commercial databases like Oracle while continuing to reliably fulfill mission-critical operations, thus freeing up resources for other vital IT initiatives.



# ABOUT EDB

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EDB is the leading worldwide provider of software and services for PostgreSQL deployments in the enterprise. EDB's comprehensive ecosystem of performance and security software enhancements for PostgreSQL, database compatibility for Oracle and migration guidance, sophisticated management tools for global deployments,

enterprise-class support and training help ensure successful enterprise deployments of PostgreSQL. Building upon 25-plus years of open source community PostgreSQL development, EDB provides companies a proven, secure, and feature-rich alternative to costly traditional databases. EDB, based in Bedford, MA, is backed by private investors.

For more information, visit <http://www.enterisedb.com/solutions> or contact [sales@enterisedb.com](mailto:sales@enterisedb.com)