
# Welcome to Lyon, France and the 2026 Common Europe Congress

# Bienvenue à Lyon, en France, et au Congrès de Common Europe 2026


# EDB Postgres on IBM Power : The Enterprise Ready PostgreSQL Platform

EDB POWER11

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ACMi

# ACMi Who Are We?

Recognized as a major player in the IBM Z, LinuxONE, Power Systems and associated storage market, ACMI is also a leader in Cloud, managed services and cybersecurity

**+ 400 customers**

## Infrastructure

IBM Power Systems – IBM Z – IBM LinuxONE - x86 Servers - Storage - FlashSystem - IBM Spectrum Storage - VTL - Hyperconverged Architectures

## Security

Data Protection – Replication - High Availability - Cybercrime Protection - Disaster Recovery Plan

## Services

Professional Services - Consulting - Managed Services - Outsourcing – Hosting - Maintenance - Private and Hybrid Cloud – IBM Cloud - DRaaS

IBM Partner Plus Platinum

EDB Partner

Auchan, Carrefour assurance, Cafés Richard, biomnis, Hermès Paris, Cémoi, Hutchinson, Thuasne, Rexel, orange, Grosfillex, Haulotte, téréva, Edmond de Rothschild, Banque Delubac & Cie, Saint-Gobain, Barrier, Trigano, deret, Themis Banque, Terminaux de Normandie, Groupe Le Duff, apave, Adecco, Université Paris 1 Panthéon Sorbonne, Rossignol, AG2R La Mondiale, Suez, RATP, A.Plus Informatique, FRAM, SOCLA, MAPA, Chauvin Arnoux, Schmidt Groupe, Tang Frères

# Cloud & Managed Services at ACMI

ACMI

ACMI Services

IaaS ACMI

Automation

ACMI Team

Compute Platforms

Storage Platforms

Alerting

Ticketing

Monitoring

Incident Management

Expertise

Operational Maintenance

Request Management

ISO 27001 BUREAU VERITAS Certification

Certified as a Health Data Host (HDS Certified)




Virtual Tape

SLA

99,97%

Through real-time replication

Remote Datacenter

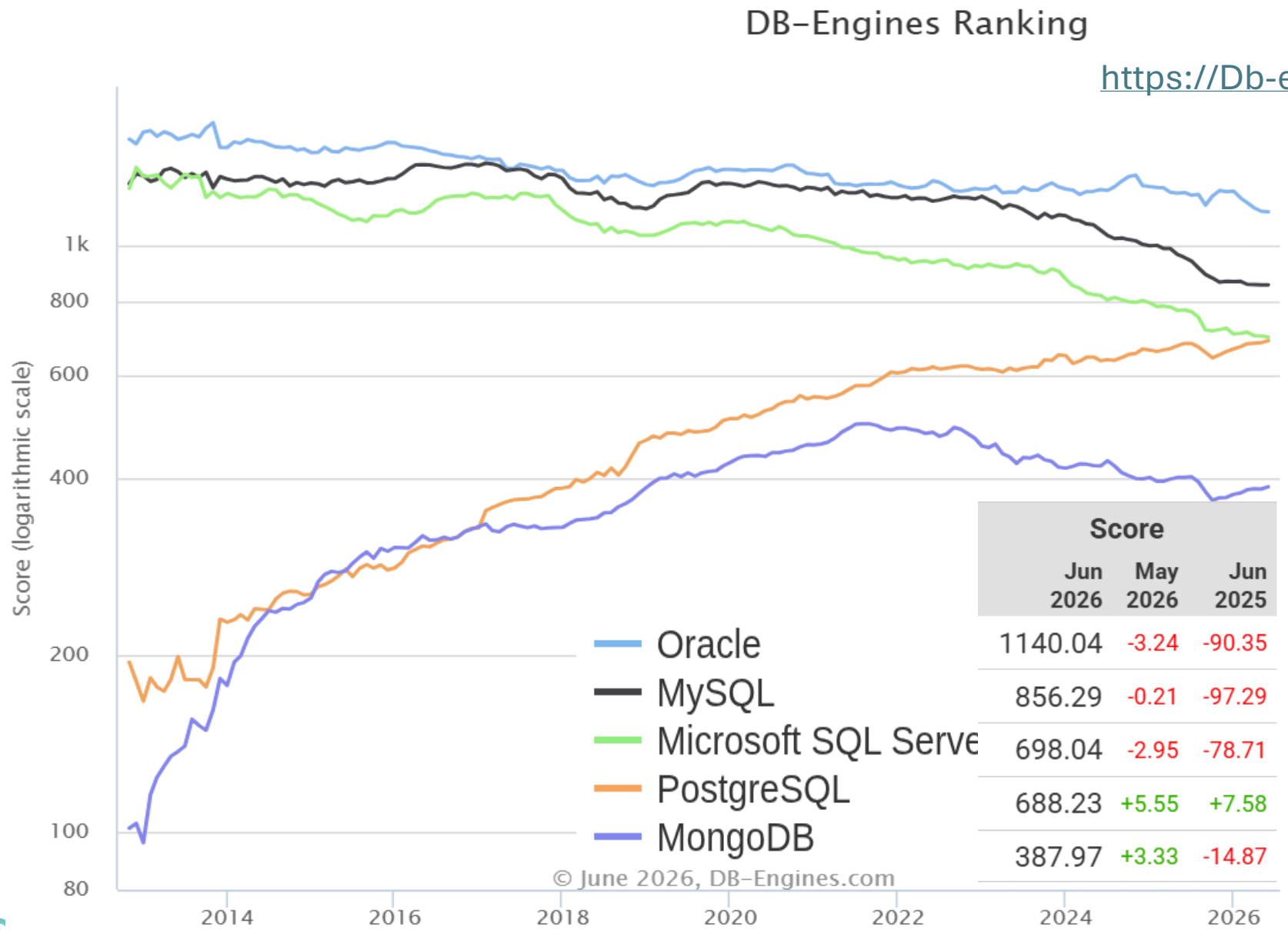



DataDomain

IBM Cloud


IBM Cloud

# PostgreSQL is Booming !




**35%**

Thirty-five percent of Enterprises will consider Postgres for their next project

**55%+**

of developers globally are using PostgreSQL, making it the most-used database in recent developer surveys.

POSTGRES AI

# PostgreSQL features that most enterprises need

## EDB Community 360 Plan

Protect  PostgreSQL with EDB Expert Support

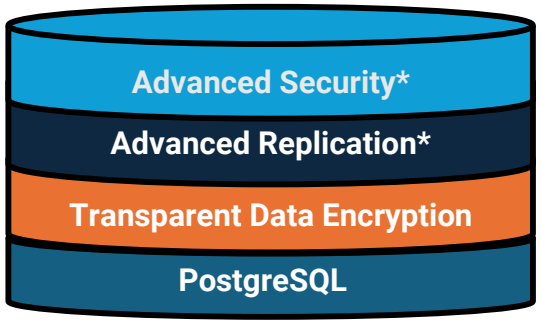
**Software:**
PostgreSQL


- Open Source Tools
- Community PostgreSQL
- EDB & Community Support
- Kubernetes Operator

## EDB Standard Plan

Strengthen and extend PostgreSQL with enhanced security, resiliency, reliability and optimization.

**Software:**
EDB Postgres Extended

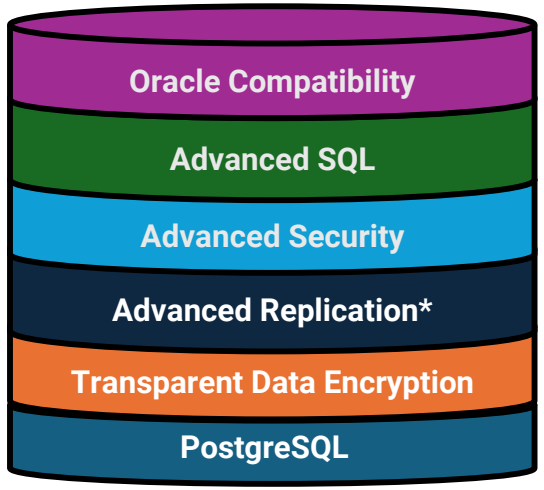



- Open Source Tools
- Community PostgreSQL
- EDB & Community Support
- Kubernetes Operator
- EDB Tools & Extension - including PEM
- EDB Postgres Distributed Add-on*
- EDB Postgres Extended

## EDB Enterprise Plan

Migrate costly Oracle workloads to Postgres or elevate Postgres to enterprise-grade with advanced security, reliability and much more.

**Software:**
EDB Postgres Advanced Server (EPAS)




- Open Source Tools
- Community PostgreSQL
- EDB & Community Support
- Kubernetes Operator
- EDB Tools & Extension - Including PEM
- EDB Postgres Distributed Add-on*
- EDB Postgres Extended
- EDB Postgres Advanced Server

# EDB and IBM Power : better together

## EDB : leading provider of Postgres based capabilities – From Support to Advanced Features

### EDB PGAI Community 360 Plan
Protect PostgreSQL with EDB Expert Support

### EDB PGAI Standard Plan
Strengthen and extend PostgreSQL with enhanced security, resiliency and optimization

### EDB PGAI Enterprise Plan
elevate Postgres to enterprise-grade with advanced security, reliability and EDB postgres AI/pgvector …

**SAME EDB on Linux on Power Experience as EBD on Linux x86**
**Same Versions, Same Features**

## IBM **Power11 : Enterprise-grade Infrastructure for Mission Critical Workloads**

### Performance
4x more threads per core

**+2x performance** per core vs x86

AI Ready (MMA / Spyre)

### Flexibility
**Deployment options** :
*VM or/and Container*

Scalability : *Up & Out*

Dynamic Scaling

Consolidation
*PEP 2.0 / Resource Group / Shared Processor Pool*

HW based virtualization without additional costs

### Security
Secure by Design
*Fewer Vulnerabilities*

**Accelerated EDB Postgres Encryption (TDE)**

Linux Volume encryption

Quantum Safe

Power Cyber Vault

### Business Continuity
Zero Planned Downtime (ZPD)

99,9999 Availability

LPM

**IBM Power and/or EDB features for HA/DR**
*VMRM, EDB Replication …*

### Economics
**Same Licensing/subscription model as x86**

No Core Factor

Workloads Consolidation for better TCO

# EDB Postgres 17 on IBM Power11 – Performance

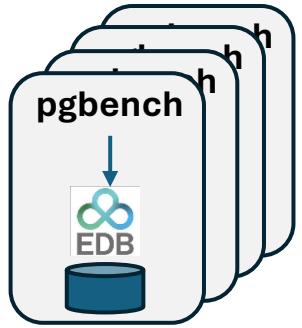
## 2.1x better performance per core for EDB on Power11 vs x86[1]

Objective : compare resource requirements for both platforms for a given Workload.

- Same pgbench workload across x86 and IBM Power servers – 180 Clients
- Same software stack on x86 and Power11
- VM at 100% CPU utilization to maximize cores usage and subscription
- 4 VMs in // to stress the physical server and be representative of client production environment

| | **IBM Power E1180** (60 cores, 2TB, 4VMs) | **Intel Xeon based 2-socket server** (160 cores, 2TB, 4VMs) |
|---|---|---|
| **Online transaction workload** Total Transactions per Second | **5,281,120.17 TPS** | **6,598,363.39 TPS** |
| **TPS/Core** | **88,018.67** | **41,239.77** |

IBM Power offers a more reliable & secure and a more performance and flexible foundation for mission-critical databases.




15 cores Power11 per LPAR
vs
40 cores x86 per VM

CPM Metrics from PrecisionIT shows a 2x perf per core ratio between Power and x86 configurations used in this testing


1. Based on IBM internal testing of multiple VM images running pgbench read-only benchmark at scale factor of 1,000, 20GB buffer size with 180 clients on Enterprise DB Postgres Advanced Server 17.6. Results valid as of Sept. 25, 2025, and conducted under laboratory conditions, individual results can vary based on workload size, use of storage subsystems and other conditions. Comparison is based on transactions per second on IBM Power E1180 (16x16core) versus Intel Xeon 6980P x86 (2x128-core) systems each with 4 VMs running Linux 9.6

# End to End Security with EDB Postgres on IBM Power full stack encryption: in transit, at rest, in memory

**Security level that organization expects for enterprise class and mission critical workloads**

EDB

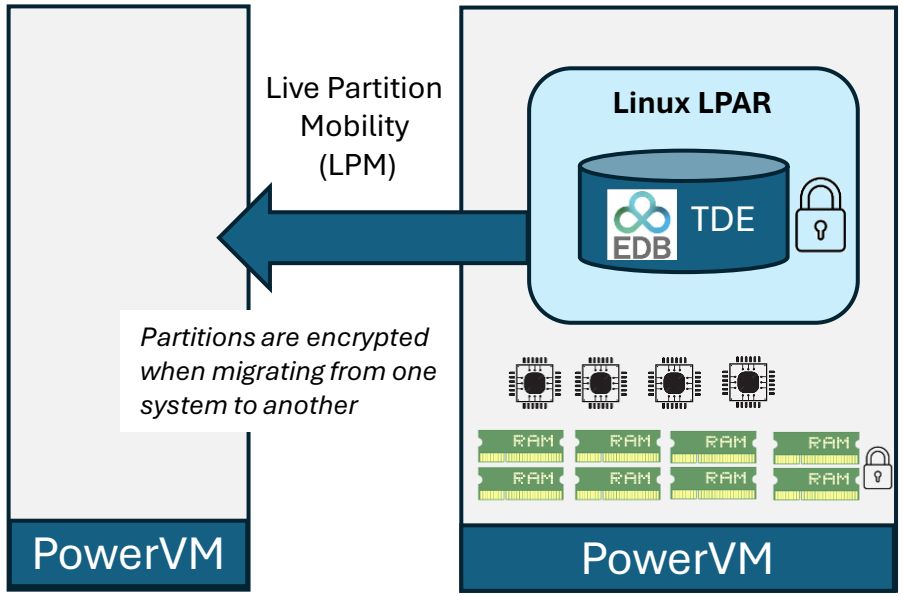
**Transparent Data Encryption**

**Data Masking & Redaction**

+ 11 **Secure by Design** + 11 **Built-In Quantum security at Hardware level.**

## Transparent Data Encryption (TDE)

- a feature **of EDB Postgres Advanced Server and EDB Postgres Extended Server**
- Encryption of Data Files / write-ahead log (WAL) / Temporary files
- AES (128 or 256) encryption algorithm using **accelerated OpenSSL libraries** on Power11




**Power11 Transparent Memory encryption**
- *No additional management setup*
- *No performance impact*

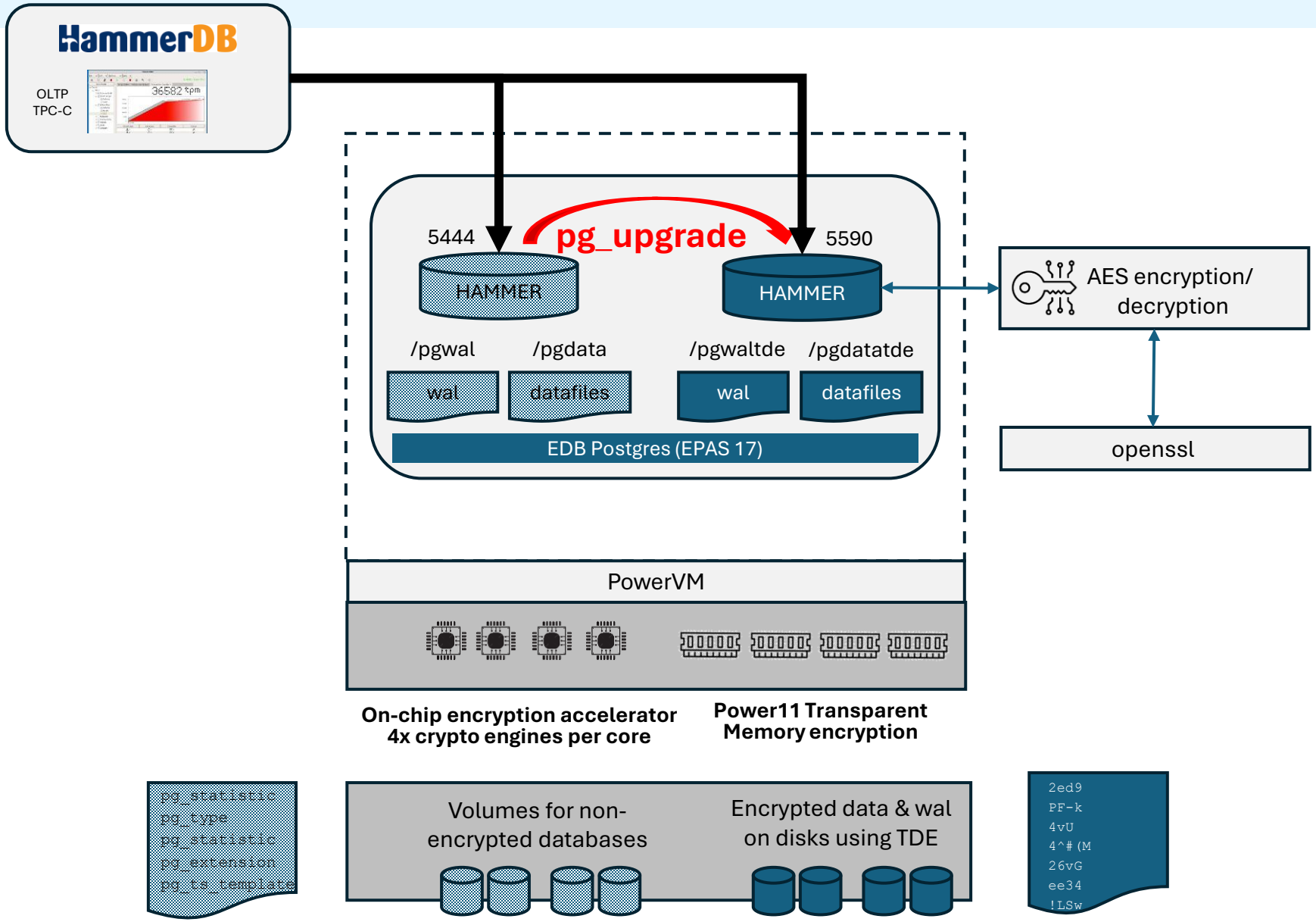
**PowerSC**

| Isolation Controls | Integrity Controls |
|---|---|
| **Secure VMs & Containers** | Run-time Verification of workload files |
| **OS / LPAR / VM Isolation** | Run-time Verification of OS files |
| **Hardware & Firmware Security** | Boot time Integrity |
| Crypto Engines<br>On Chip Accelerators<br>Compressed and Encrypted LPM Data | Trusted Platform Module (TPM)<br>Secure Boot<br>Trusted Boot |

**At least 13x fewer vulnerabilities than KVM, VMWare, Hyper-V**

https://www.enterprisedb.com/docs/tde/latest/

# Secure critical database with TDE/EDB Postgres on IBM Power

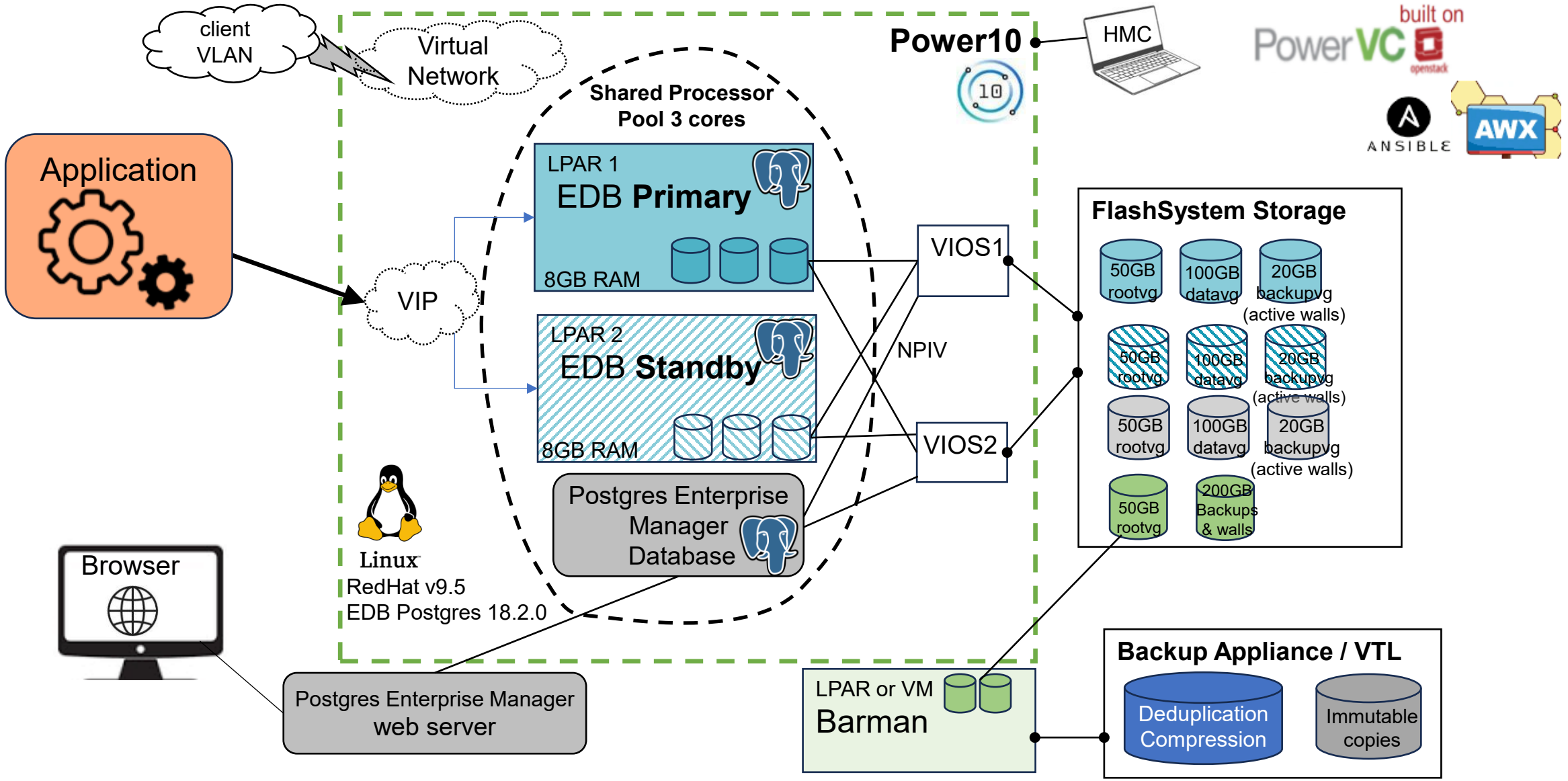



**Encryption Steps**

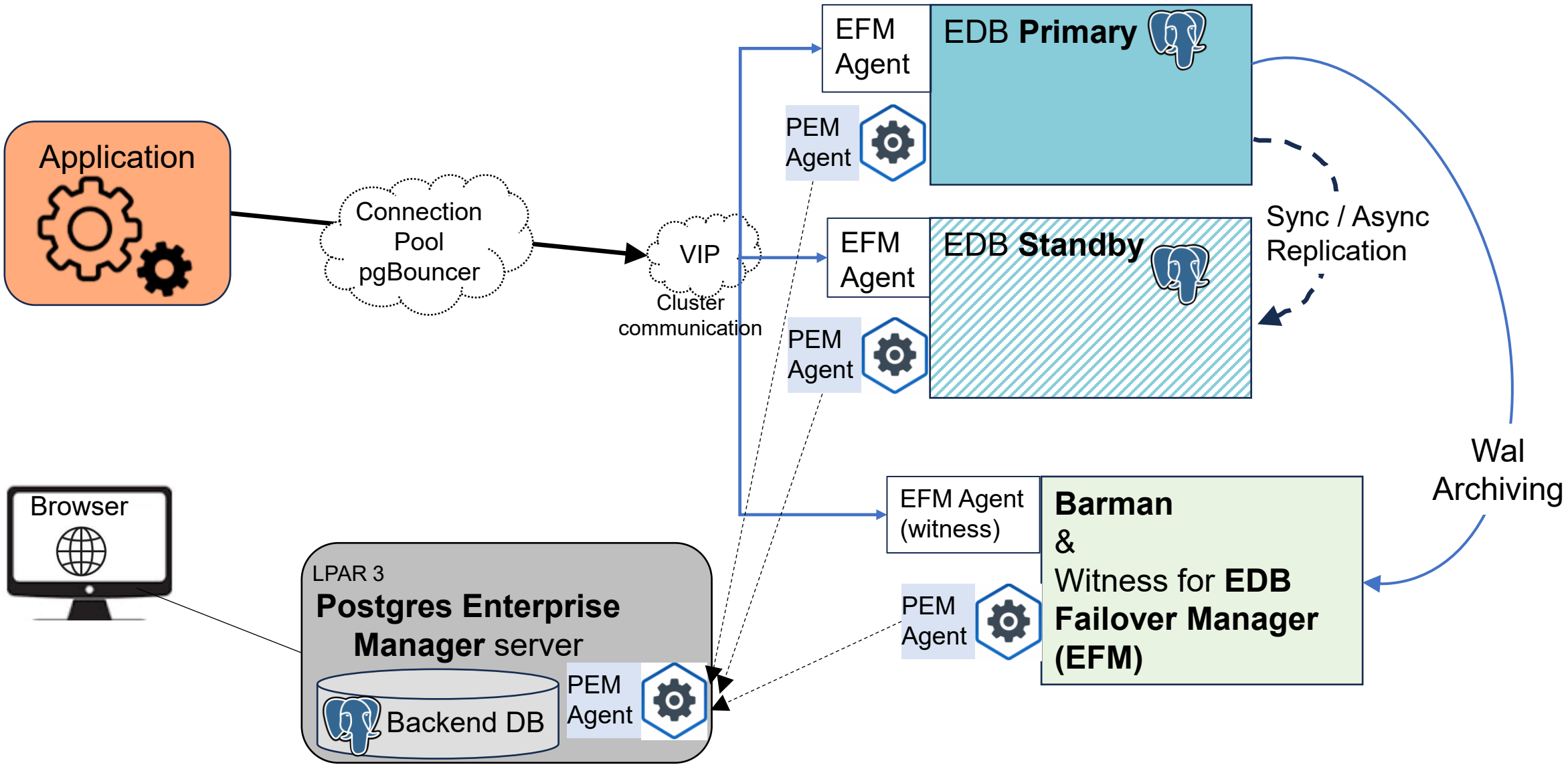
1. Create new volumes to host encrypted database
2. Create new EDB Postgres Cluster with encryption enabled
3. Check mode to test for incompatibilities with source DB
4. Perform pg_upgrade to encrypt data and copy datafiles and wal to targeted filesystems
5. Verify pg_upgrade
6. Clean up unencrypted server

# Physical Architecture HA/DR example

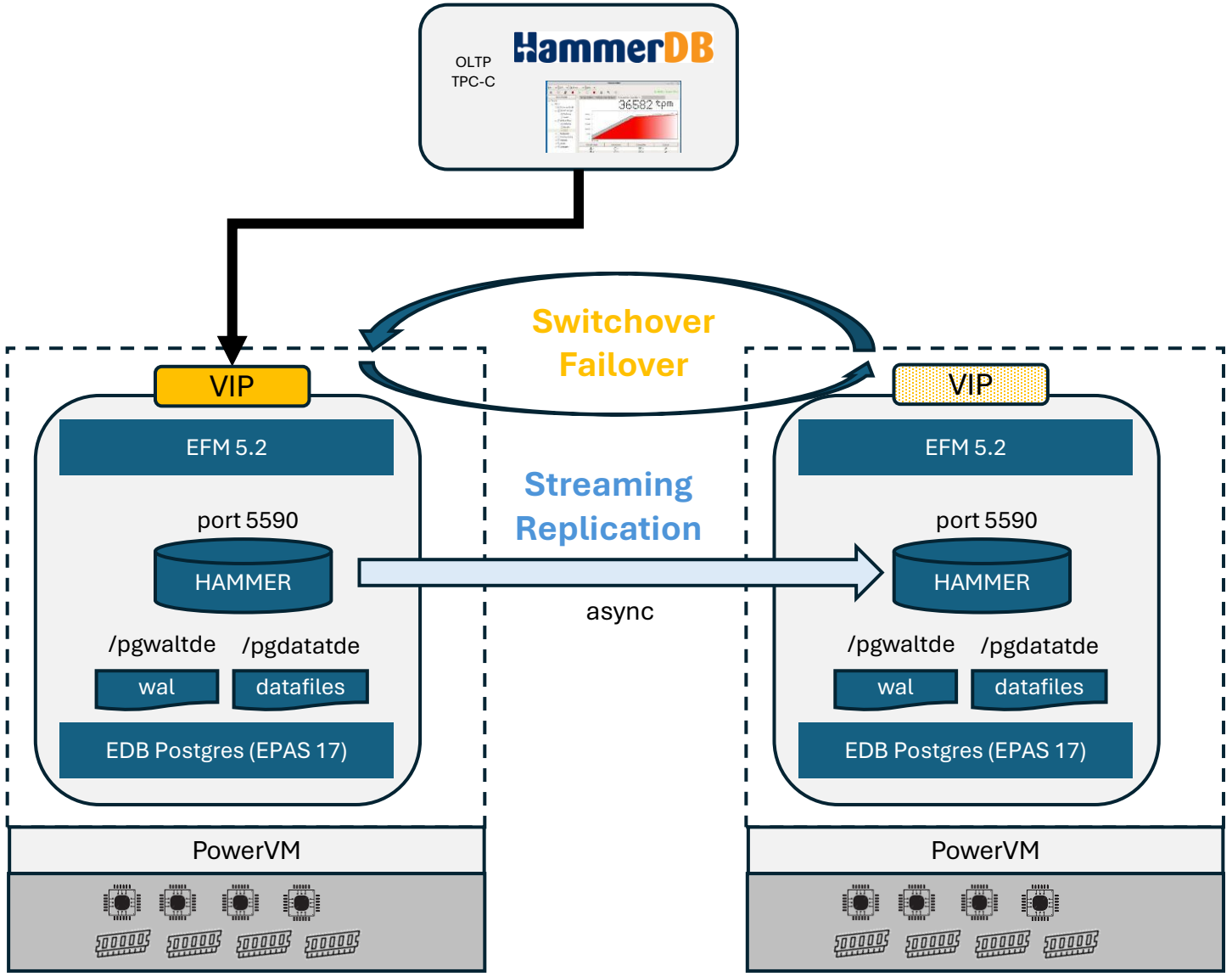
for production environment, Primary and Standby are not on the same Physical server



# Logical Architecture



# Enterprise PostgreSQL HA/DR on IBM Power with EDB Streaming Replication




**Steps**

1. Configure PostgreSQL Streaming Replication
2. Establish SSH Trust Between Primary and Standby Nodes
3. Create the Standby Database using pg_basebackup
4. Install EDB Failover Manager (EFM) on Both Nodes
5. Configure EFM Settings (VIP, Policies, Monitoring ...)
6. Validate the HA/DR Environment
    1. Perform a Planned Switchover Scenario
    2. Simulate an Unplanned Failover Scenario
7. Run HammerDB Workload and Application Validation Test

✅ **High Availability with Automatic Failover**
✅ **Lower Operational Complexity**
✅ **Improved Database Reliability**

# EDB Postgres for Kubernetes on IBM Power : an Enterprise grade Database as a Service (DBaaS) solution

## EDB Technology

Stack of enterprise grade products designed, developed, and supported by EDB

Many EDB products for server-based deployments are available for Kubernetes - Oracle Compatibility, workload optimizations, TDE and other enterprise security features

## Kubernetes Experience

EDB Postgres for Kubernetes operator - based on the EDB created CloudNativePG operator

EDB deep expertise leverages Kubernetes to operationalize Postgres cluster management

## Red Hat Certified

Red Hat Certified Kubernetes Operator

Available on Red Hat OpenShift

## IBM Power : Platform Leadership

- Availability / Resiliency 99.9999% uptime
- End to End security
- Sustainability
- Performance & Efficient Scaling

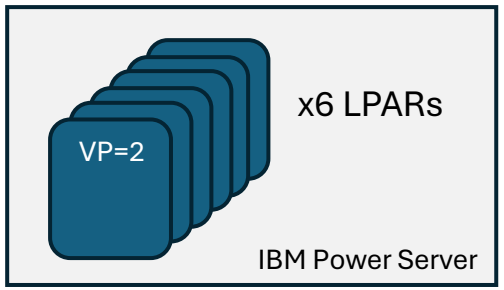
# EDB Postgres on IBM Power Economics : Flexibility and Optimization

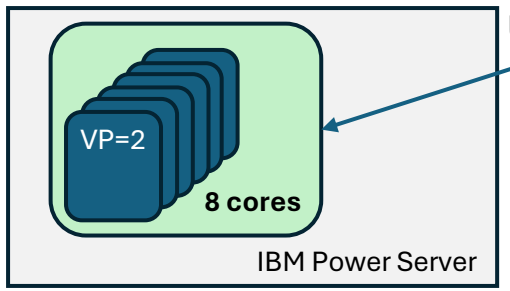
EDB (EnterpriseDB) products are licensed on an **annual subscription basis**

**EDB Postgres Units Of Measure (UOM) is uniCore (*)** which may be either a physical core in a physical server, a virtual core in a virtualized server / virtual infrastructure, or a virtual CPU in a public IaaS or PaaS environment where the Software is installed or running.

→ **No complex licensing, simple T&C**
→ **No Core Factor = same licensing model as x86**
→ **IBM PowerVM Shared Processor Pool Benefits**

**12 Cores EDB Subscription**




**User defined Shared Processor Pool**

Sum VP > Shared Pool Size

**8 Cores EDB Subscription**

## Recognition of Unique Power Features (RG, PEP 2.0, LPM) without EDB Postgres Licensing Impacts

**Live Partition Mobility (LPM)** allows a customer to deploy their purchased subscription in one environment and then later move those uniCores to a new different environment (License Mobility)

**Power Enterprise Pool (PEP 2.0)** optimize Infrastructure Acquisitions Costs and/or help transition to Pay per Use
→ Power is capacity based SW Licensing vs VM based licensing on x86 & Public Cloud
→ PEP 2.0 is REAL Consumption Model vs Pay per assigned resources in cloud environments.

**Power11 Resource Group** improves **Workloads Isolation and Performance** thanks to shared processor dispatching optimization.

(*) minimum initial purchase for each environment is 8 uniCores. a three-year subscription is required if fewer. https://www.enterprisedb.com/enterprisedb-license-support-and-services-agreement-5

# Power is/ the Enterprise DATA platform

**Transform PostgreSQL to Enterprise-Ready and/or Upgrade to Enterprise-Grade PostgreSQL Database**

Upgrade from community edition to a fully supported platform

Leverage enterprise class management, reliability, control and tooling out of the box

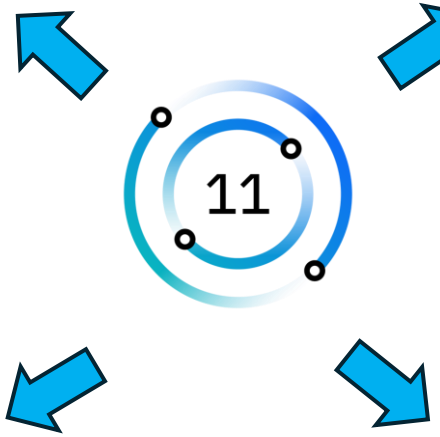
RHEL Licensing Parity on Power as x86
No Virtualization added Costs
Fewer EDB Subscription on Power than x86

**Combine Data security, governance and AI needs.**

Built-in AI Tooling with EDB Postgres AI's accelerators (embedding/vector extensions, pipelines, pgVector)

EDB's AI / Analytical Features complementing Watsonx.data Analytics

High-Throughput, Low-Latency AI Data Processing
Unified Platform




**Corporate strategy for modern applications built on Open-Source Databases**

DBaaS on Openshift on IBM Power

Smooth migration from x86 using Red Hat Openshift MAC

**Escape Oracle Lock-In while Optimizing Oracle Landscape**
**Oracle Migrations & Modernization**

IBM Power is Oracle Cost Savings/Cost Avoidance
Power is Investment Protection
OSDB on Power is Oracle Costs Savings

[1] IBM announced availability of watsonx.data on Power by the end of 2025.

# Oracle Database Migration Journey with EDB

https://www.enterprisedb.com/products/migration-free-tool-migrating-oracle-postgresql

## 1. Preparation

### Download EDB DDL Extractor

Get the latest EDB DDL Extractor for optimal assessment results.

### Run SQL Script

Execute the DDL Extractor script on oracle database to generate a multi-schema DDL file.

## 2. Migration Portal Assessment

### Automated Repair

The Portal assesses DDLs for EPAS compatibility and applies automated repairs via the Repair Handler.

**Code Transformation Example (Repair Handler)**

ORIGINAL ORACLE DDL

```
CREATE TABLE tab (
ID INT NOT NULL ENABLE
);
```

TRANSFORMED EDB EPAS DDL

```
CREATE TABLE tab (
ID INT NOT NULL
);
```

```
-ERH-2009 deleted [ENABLE]
```

## 3. Adaptation

### Manual Refinement

Use the Knowledge Base and AI Copilot for suggestions and syntax equivalents.

### AI Copilot

Ask questions about compatibillity, syntax or EPAS equivalents

### Knowledge Base

Obtain suggestions for resolutions or workarounds

## 4. Reassessment

### Final Reassessment

The Portal reassesses modified DDLs for EPAS compatibility and ready for migration.

## 5. Schema Migration

### Migration Options

**Online:** Direct migration to EPAS

**Offline:** Export to SQL file

**Reporting:** Generate final reports

## 6.Data Migration

### Data Migration Options

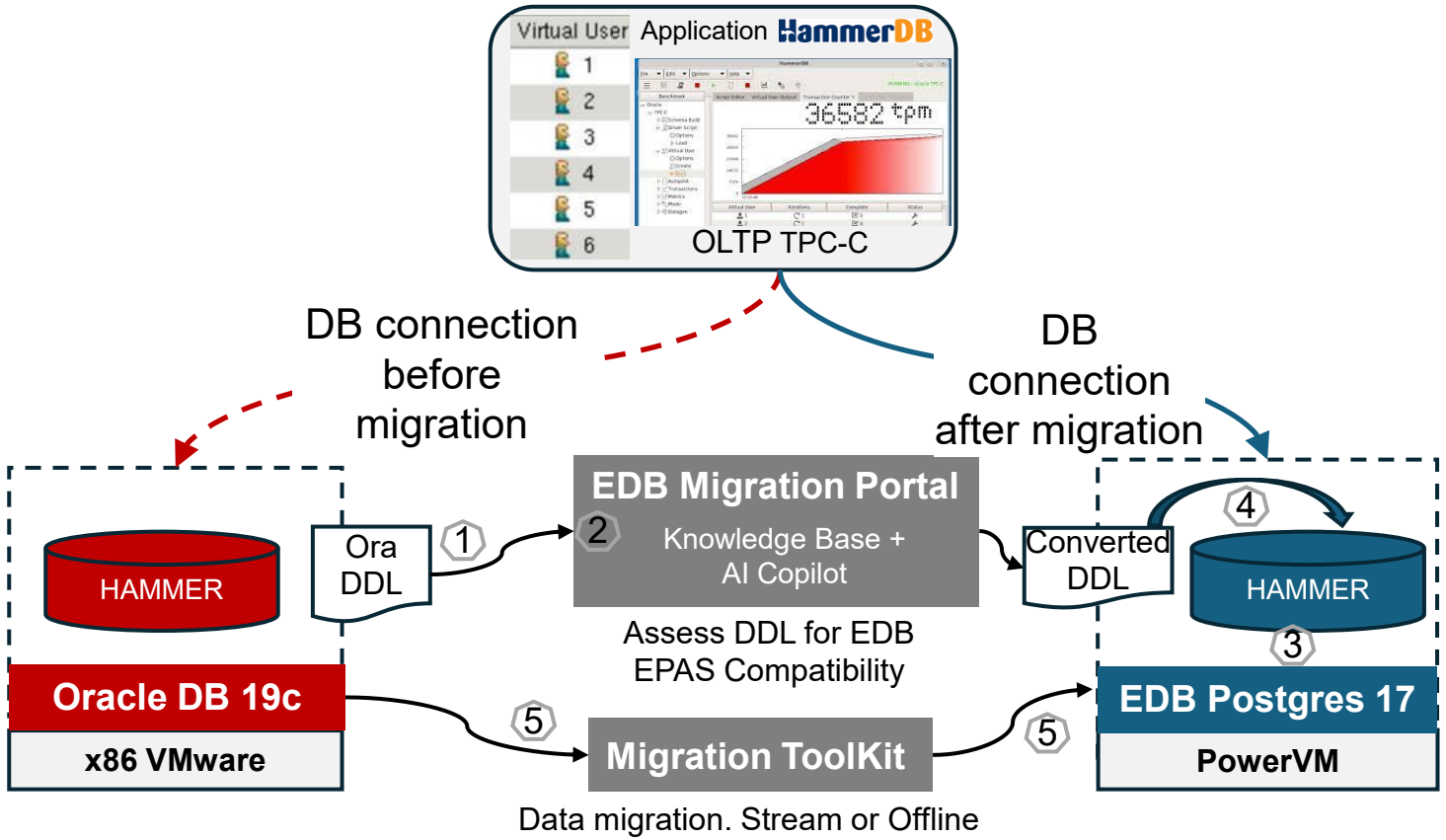
**Snapshot: EDB Migration Toolkit** to migrate Data.

**Streaming: Replication Server** for CDC.

## 7.Data Validation

EDB POSTGRES AI

# Database Migration from Oracle/x86 to EDB Postgres/IBM Power




## Demonstration scenario

1. Run DLL Extractor on OracleDB and Upload DLL file to EDB Migration Portal
2. Analyze Oracle database schemas and convert DLL statement for EDB EPAS Compatibility
3. Create EDB Postgres Instance
4. Deploy converted Oracle DDL into EDB Postgres Instance
5. Use Migration Toolkit for offline Oracle DB migration
6. Sanity Check
7. Restart application load into EDB Postgres Instance and check TPM performance

- ✅ **Accelerate Oracle migrations, Reduce migration complexity** with AI-driven compatibility
- ✅ **Minimize downtime** with proven migration tooling
- ✅ **Lower database licensing costs** with EDB PostgreSQL on IBM Power

# Questions ?

**Thank You !**

Any question, contact us

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