

Compare Fujitsu Enterprise Postgres with PostgreSQL



Discover how Fujitsu Enterprise Postgres takes the power of PostgreSQL to the next level.

Fujitsu Enterprise Postgres is an enhanced PostgreSQL for enterprises seeking a more robust, secure, and fully supported edition in business environments.

Feature	Postgres 17	Fujitsu Enterprise Postgres					
		17	16	15	14	IBM LinuxONE	IBM Power
Generative AI for enterprise	✗	✓	✗	✗	✗	✓	✓
Knowledge Data Management							
RAG application development	✗	✓	✗	✗	✗	✗	✗
Transparent Data Encryption (256-bit PCI DSS-compliant)	✗	✓	✓	✓	✓	✓	✓
Data Masking	✗	✓	✓	✓	✓	✓	✓
Dedicated audit logs	✗	✓	✓	✓	✓	✓	✓
Key management for Transparent Data Encryption	✗	✓	✓	✓	✓	✓	✓
Cloud-based key management	✗	✓	✓	✓	✗	✓	✓
Confidentiality management	✗	✓	✓	✓	✗	✓	✓
Policy-based login security	✗	✓	✓	✓	✗	✓	✓
FIPS compliance	✗	✓	✓	✓	✗	✓	✓
Anomaly detection	✗	✓	✓	✓	✓	✓	✓
Integration with CryptoCard hardware security module (HSM)	✗	✗	✗	✗	✗	✓	✗
IBM Hyper Protect Data Controller	✗	✗	✗	✗	✗	✓	✗
Vertical Clustered Index (In-Memory Columnar Index)	✗	✓	✓	✓	✓	✓	✓
Global Meta Cache	✗	✓	✓	✓	✓	✓	✓
High-speed backup/recovery	✗	✓	✓	✓	✓	✓	✓
High-speed data load	✗	✓	✓	✓	✓	✓	✓
zEnterprise Data Compression (zEDC)	✗	✗	✗	✗	✗	✓	✗
Mirroring Controller	✗	✓	✓	✓	✓	✓	✓
Connection Manager	✗	✓	✓	✓	✓	✓	✓
Database Transaction Log Mirroring	✗	✓	✓	✓	✓	✓	✓
WAL duplication	✗	✓	✓	✓	✓	✓	✓
Smart setup (Create Master / Standby / Standalone)	✗	✓	✓	✓	✓	✓	✓
Easy backup/recovery	✗	✓	✓	✓	✓	✓	✓
Instance configuration / management	✗	✓	✓	✓	✓	✓	✓
Easy cluster setup / management (with Mirroring Controller)	✗	✓	✓	✓	✓	✓	✓
Support for COBOL applications	✗	✓	✓	✓	✓	✗	✗
System usage statistics	✗	✓	✓	✓	✓	✓	✓
Enhanced GUI for cluster management	✗	✓	✓	✓	✓	✓	✓
WebAdmin	✗	✓	✓	✓	✓	✓	✓
Rapid setup	✗	✓	✓	✓	✓	✓	✓
Interoperability (ability to connect to older versions)	✗	✓	✓	✓	✓	✓	✓
Support for embedded SQL National Character Data in COBOL	✗	✓	✓	✓	✓	✗	✗

AI features

- **Generative AI for enterprise**  

Build data infrastructure that can be used safely and easily for AI applications. The pgvector extension allows vector data to be safely stored and protected by Fujitsu's enterprise security features.

- **Knowledge Data Management** 

Search knowledge data in three ways -text semantic search, vector similarity search, and graph traversal-, in addition to traditional search methods.




- **RAG application development** 

Integration with the RAG development framework LangChain simplifies the creation of applications powered by large language models (LLMs).

Security features

- **Generative AI for enterprise**  

Build data infrastructure that can be used safely and easily for AI applications. The pgvector extension allows vector data to be safely stored and protected by Fujitsu's enterprise security features.

- **Transparent Data Encryption (256-bit PCI DSS-compliant)**   

256-bit encryption is one of the most secure encryption methods available as it uses a 256-bit key to encrypt/decrypt data.

- **Data Masking**  

Data Masking allows you to retain the actual structure of the data when sharing a database with sensitive customer information beyond the permitted production environment, such as for development and testing.

- **Dedicated Audit Log** 

This is a unique feature of Fujitsu Enterprise Postgres to deliver in the key areas of data accountability, traceability, and the ability to audit. It is also Payment Card Industry Data Security Standard (PCI DSS).

- **Key management for Transparent Data Encryption** 

Increased flexibility to use KMIP certified external Key Management Systems (KMS) for improved data security. Reduced risk of data leakage by storing encryption keys outside the database. Better governance by the division of role between the database administrator and the administrator for Master Encryption Keys.

- **Cloud-based key management** 

Allows you to store Transparent Data Encryption keys in cloud key management services. Supports plug-ins to call communication adapters in the cloud and to share data encryption keys. Key management services in the cloud provide more choices for key management, lower operational costs, and increased security.

- **Confidentiality management**  

Simpler operations for role-based access control (RBAC) setting and audit. Easier and more efficient security operations, and reduced human errors, minimizing security risks.

- **Policy-based login security**  

Prevent unauthorized logins and improve database security by setting password expiration dates and locking users who repeatedly fail to log in or are dormant to restrict access to their accounts.

- **FIPS compliance**  

Fujitsu Enterprise Postgres with Cryptographic Module can use algorithms approved by the Cryptographic Module Security Requirements (Federal Information Processing Standard) 140, designed to ensure strengthened data encryption and communication security.

- **Anomaly detection**   

This enables you to identify suspicious items, events or observations based on the fact they differ from the majority of the data. These can often be problems such as fraud, a structural defect, or errors in text.




- **Integration with CryptoCard hardware security module (HSM)** 


The CryptoCard is a hardware security module (HSM) that protects your digital keys by storing them in separate hardware and is FIPS 140-2 Level4 certified.


- **IBM Hyper Protect Data Controller** 



Centralized access control by encrypting data into trusted data objects before leaving the system of record. Protects selected data as it traverses the enterprise network and prevents unauthorized access.



Performance features


- Transparent Data Encryption (256-bit PCI DSS-compliant)**   

256-bit encryption is one of the most secure encryption methods available as it uses a 256-bit key to encrypt/decrypt data.
- Vertical Clustered Index (In-Memory Columnar Index)** 

Fujitsu's implementation of In-Memory Columnar Index uses a parallel-processing engine to instantly update column-oriented data in response to changes in row-oriented data, and processes column-oriented data quickly.
- Global Meta Cache** 



This is a unique feature of Fujitsu Enterprise Postgres that caches system catalog and table information in shared memory instead of in per-process memory.
- High-speed backup/recovery**  



Improved efficiency and meant time to recovery. Also back up and recover the cluster and selected tablespaces using any user-specified copy method. On IBM LinuxONE, zEDC hardware compression increases performance.
- High-speed data load**  


Runs the PostgreSQL COPY command in parallel using as many workers as your available resources allow.
- zEnterprise Data Compression (zEDC)** 


On-chip compression accelerator reduces disk usage by compressing backup data and archive logs at high speed. Hardware compression results in 40% performance improvement.




Reliability features




- Mirroring Controller**  




This is a unique feature to Fujitsu Enterprise Postgres that continually monitors your system and seamlessly switches online transaction processing to an alternate server to ensure business continuity when an abnormality is detected.
- Connection Manager**  




This is a unique feature of Fujitsu Enterprise Postgres that allows application access and replication operation to be continued without being aware of the connection destination of the applications.
- Database Transaction Log Mirroring** 



Transaction records are continuously streamed from the primary database to the standby database. This secures your transaction logs.
- WAL duplication** 

Solves PostgreSQL's single point of failure.
- Smart setup (Create Master/ Standby/ Standalone)**   

Leverage the smart setup features to setup your database quickly and efficiently often saving time and money as well as ensuring correct setup from the start.
- Easy backup/ recovery**   


































Utilize extensive data backup and recovery features to protect yourself in the case of data loss due to any number of events including deletion and corruption.
- Instance configuration / management**   

Fujitsu Enterprise Postgres provides an efficient GUI-based tool to configure and maintain your DB instances.
- Easy cluster setup and management (with Mirroring Controller)**   

This enables several servers or instances (collection of memory and processes that interact with a database, as in the actual files and processes) to connect to a single version of the database.
- High-speed backup/recovery**  

One-click backup/recovery improves efficiency and meant time to recovery. Also back up and recover the cluster and selected tablespaces using any user-specified copy method. On IBM LinuxONE, zEDC hardware compression increases performance.

DevSecOps features

- Transparent Data Encryption (256-bit PCI DSS-compliant)**   
 256-bit encryption is one of the most secure encryption methods available as it uses a 256-bit key to encrypt/decrypt data.
- Data Masking**  
 Data Masking allows you to retain the actual structure of the data when sharing a database with sensitive customer information beyond the permitted production environment, such as for development and testing.
- FIPS compliance**  
 Fujitsu Enterprise Postgres with Cryptographic Module can use algorithms approved by the Cryptographic Module Security Requirements (Federal Information Processing Standard) 140, designed to ensure strengthened data encryption and communication security.
- Anomaly detection**   
 This enables you to identify suspicious items, events or observations based on the fact they differ from the majority of the data. These can often be problems such as fraud, a structural defect, or errors in text.
- High-speed data load**  
 Leverages PostgreSQL COPY command, running it in parallel with as many workers as available resources allow.
- Smart setup (Create Master/ Standby/ Standalone)**   
 Leverage the smart setup features to setup your database quickly and efficiently often saving time and money as well as ensuring correct setup from the start.
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 This enables several servers or instances (collection of memory and processes that interact with a database, as in the actual files and processes) to connect to a single version of the database.
- Support for COBOL applications** 
 Execute SQL commands from your legacy COBOL programs with little to no modifications. Embedded SQL in COBOL programs is precompiled by ECOBPG, so that its output can be processed by any COBOL compiler.
- System usage statistics**  
 A network usage monitor enables users to review your database's utilization metrics and statistics to discover and manage the resource utilization of your database.
- Enhanced GUI for cluster management**  
 Simplify the setup and management of streaming replication clusters.
- WebAdmin**  
 Helps you easily manage your database and its contents saving time and money.
- Interoperability (ability to connect to older versions)**  
 Data interoperability means that the data you create can be utilized by any older versions of the platform you may have residing across the organization.
- Support for variable format source code in COBOL programs** 
 Fujitsu Enterprise Postgres supports a variable version of source code in COBOL applications.

Usability features

- **Confidentiality management**  

Simpler operations for role-based access control (RBAC) setting and audit. Easier and more efficient security operations, and reduced human errors, minimizing security risks.

- **Policy-based login security**  

Prevent unauthorized logins and improve database security by setting password expiration dates and locking users who repeatedly fail to log in or are dormant to restrict access to their accounts.

- **Anomaly detection**   

This enables you to identify suspicious items, events or observations based on the fact they differ from the majority of the data. These can often be problems such as fraud, a structural defect, or errors in text.

- **Mirroring Controller**  

This is a unique feature to Fujitsu Enterprise Postgres that continually monitors your system and seamlessly switches online transaction processing to an alternate server to ensure business continuity when an abnormality is detected.

- **Connection Manager**  

This is a unique feature of Fujitsu Enterprise Postgres that allows application access and replication operation to be continued without being aware of the connection destination of the applications.

- **Smart setup (Create Master/ Standby/ Standalone)**   

Leverage the smart setup features to setup your database quickly and efficiently often saving time and money as well as ensuring correct setup from the start.

- **Easy backup/ recovery**   

Utilize extensive data backup and recovery features to protect yourself in the case of data loss due to any number of events including deletion and corruption.

- **Instance configuration / management**   

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- **Easy cluster setup and management (with Mirroring Controller)**   

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- **System usage statistics**  

A network usage monitor enables users to review your database's utilization metrics and statistics to discover and manage the resource utilization of your database.

- **Enhanced GUI for cluster management**  

Simplify the setup and management of streaming replication clusters.

- **WebAdmin**  


Helps you easily manage your database and its contents saving time and money.

- **Rapid setup**  

Save time and money by setting up the database quickly and easily.

- **Interoperability (ability to connect to older versions)**  

The data you create can be use by older versions of the platform you may have residing across the organization.

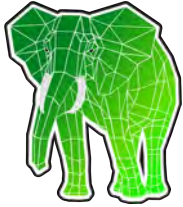
- **Easy setup (installer)** 

PostgreSQL has offered an installer system since version 8.0 to make the process easier and faster.

Fujitsu Enterprise Postgres can help your journey

Fujitsu Enterprise Postgres is the enhanced version of PostgreSQL, for enterprises seeking a more robust, secure, and fully supported edition for business-critical applications.

It is fully compatible with PostgreSQL and shares the same operation method, interface for application development, and inherent functionality. Designed to deliver the Quality of Service (QoS) that enterprises demand of their databases in the digital world, while supporting the openness and extensibility expected of open source platforms, all at a lower cost than traditional enterprise databases.



Fujitsu Enterprise Postgres

Combine the strengths of open-source PostgreSQL with the enterprise features developed by Fujitsu.

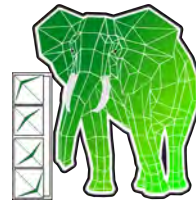
Enhanced speed, security, and support — without the costs associated with most proprietary systems.



Fujitsu Enterprise Postgres for Kubernetes

Utilize operator capabilities for provisioning and managing operations on the OpenShift Container Platform.

Business-ready database that integrates container operation technology for rapid development-to-production deployments.



Fujitsu Enterprise Postgres on IBM LinuxONE™

World-class platform that embraces open source and improves data security, performance, and business continuity.

The best of open source flexibility with the peace of mind that comes from knowing it is backed by Fujitsu and IBM.



Fujitsu Enterprise Postgres on IBM Power®

Experience frictionless hybrid cloud that can help you modernize to respond faster to business demands.

Fujitsu database designed for security, performance, and reliability, combined with IBM server built for agility in the hybrid cloud.

