# Fujitsu Enterprise Postgres 15 (SP1) on IBM LinuxONE

# Glossary

Linux

**FUJITSU**

# Preface

**Purpose of this document**

This document explains Fujitsu Enterprise Postgres terminology.

**Intended readers**

This document is aimed at all users of Fujitsu Enterprise Postgres.

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# Glossary

## Arbitration command

A user command called when an abnormality is detected using operating system/server heartbeat monitoring in database multiplexing mode.

## Arbitration server

A dedicated server on which the Server Assistant program is installed.

## Archive log

Contains the history of updates made to the database, and is used during recovery.

## Backup data storage destination

The directory that stores the backup data.

## Client command

A command that is executed from the client machine and used. Also known as a client application.

## Confidentiality group

An object that indicates which confidentiality level roles in confidentiality group can acdess.

## Confidentiality group role

The targets of GRANT and REVOKE statements executed internally by the confidentiality management feature.

## Confidentiality level

A group of data with the same degree of confidentiality.

## Confidentiality object

A collection of data classified by confidentiality level, representing an object in the database.

## Confidentiality privilege

The privileges indicate how a confidentiality group can access confidentiality objects registered at a certain confidentiality level.

## Confidentiality management role

A role that manages confidentiality matrices.

## Confidentiality Management

A feature that supports database users in setting appropriate privileges for each database resource.

## Confidentiality matrix

A matrix of confidentiality levels and confidentiality groups.

## Connection Manager

The replication operation to continue without knowing where the application is connected.

The Connection Manager feature improves the availability.

## Data storage destination

The directory that stores the database clusters.

### Database cluster

The database storage area on the database storage disk. Database clusters are a collection of databases managed by an instance.

### Data masking

A feature that can change the returned data for queries generated by applications, to prevent exposing actual data.

### Database multiplexing

Mechanism in which a database is made redundant on multiple servers, by transferring transaction logs (WAL) via the network to enable application jobs to be continued.

### Database superuser

A user defined in the database with access privileges for all database objects.

### Encoding

Indicates the character set.

### Fencing

A process that isolates a database server with an unstable status from the cluster system in database multiplexing mode. This process is implemented as a fencing command.

### Fencing command

A user command that implements fencing in database multiplexing mode.

### Global Meta Cache

The Global Meta Cache feature cache the informations about system catalogs information (catalog meta cache) in shared memory. The catalog meta cache on shared memory is called the Global Meta Cache (GMC).

### Instance

A series of server processes for managing database clusters.

### Instance administrator

The OS user account that owns the database cluster files and operates the database server processes.

### Instance name

Indicates the instance name.

### Key management system

A system that manages data encryption keys when using the transparent data encryption feature.

### Local Meta Cache Limit

The ability to limit the size by removing the Local Meta Cache that has not been accessed for a long time.

Local Meta Cache is a meta cache (system catalog and table definition information) held in local memory.

### Masking policy

A method of changing data under specific conditions when it is returned for a query from an application. You can configure masking target, masking type, masking condition and masking format.

### Mirrored transaction log

The log that mirrors the transaction log at the backup data storage destination.

## Mirroring Controller arbitration process

A process that performs arbitration and fencing on the arbitration server.

## Mirroring Controller monitoring process

A process that performs heartbeat monitoring of the Mirroring Controller process. If the Mirroring Controller process returns no response or is down, the Mirroring Controller monitoring process is restarted automatically.

## Mirroring Controller process

A process that performs operating system/server and process heartbeat monitoring and disk abnormality monitoring between database servers. Additionally, the process issues arbitration requests to the arbitration server and executes arbitration commands.

## Pgpool-II connection pooling

The connection pooling feature of Pgpool-II supported by Fujitsu Enterprise Postgres.

This feature maintains the connection established with the database server and reuses that connection each time a new connection with the same properties (user name, database, and protocol version) arrives. By reducing the connection overhead for the database server, throughput of the whole system is improved.

## Pgpool-II failover

The automatic failover feature of Pgpool-II supported by Fujitsu Enterprise Postgres.

If any of the database servers crashes or can no longer be reached, this feature disconnects the server and continues operation on the remaining servers. The streaming replication feature of PostgreSQL is combined with Pgpool-II to achieve a high-availability system.

## Pgpool-II load balancing

The load balancing feature of Pgpool-II supported by Fujitsu Enterprise Postgres.

This feature distributes reference queries to multiple database servers, improving throughput of the whole system. The database multiplexing feature or PostgreSQL streaming replication feature is combined with Pgpool-II to reduce the load on the database server.

## Pgpool-II server

A server for using the failover, connection pooling, and load balancing features of Pgpool-II. It is a dedicated server that has a server program installed for using these features.

## Primary server

The server that processes the main database jobs during multiplexed database operation.

## Server Assistant

A feature that objectively determines the status of database servers as a third party, and if necessary, isolates affected databases if the database servers are unable to accurately ascertain their mutual statuses in database multiplexing mode, such as due to a network error between database servers, or server instability.

## Server Assistant program

A program to be installed on the arbitration server.

## Server command

A command used on the database server. Also known as a server application.

## Standby server

A server that generates a replicated database synchronized with the primary server, and that can run as an alternative server in case the primary server fails during multiplexed database operation.

### State transition command

A user command called when Mirroring Controller performs a state transition of a database server in database multiplexing mode. State transition commands include the post-switch command, pre-detach command, and post-attach command.

### Transaction log

Contains the history of updates made to the database by transactions. Also known as the WAL (Write-Ahead Log).

### Transaction log storage destination

The directory that stores the transaction log.

### VCI (Vertical Clustered Index)

An index with columnar data structure suitable for aggregation.

### WAL (Write-Ahead Log)

Has the same meaning as 'transaction log'.

### WebAdmin program

A GUI-based program installed on a database server or a dedicated WebAdmin server, used to manage database instances.

### WebAdmin server

By using the WebAdmin program on a different server to the database server, instances on multiple database servers can be managed from a dedicated WebAdmin server on which the WebAdmin program is installed.

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