

### PostgreSQL, high availability



SII-405 2 Days (14 Hours)



## **Description**

This training is intended for PostgreSQL administrators and aims to provide them with the necessary knowledge to understand high availability mechanisms with PostgreSQL. You will learn how to implement an operational solution by detailing the different techniques such as Warm Standby, asynchronous replication with Slony and load balancing with PgPool.

# Who is this training for ?

#### For whom

Database administrators and systems administrators.

### **Prerequisites**

Good knowledge of PostGreSQL administration or knowledge equivalent to that provided by the "PostgreSQL, administration" internship (ref. PGA).

# Training objectives

- Implement replication with a Warm Standby server
- Modify replication sets
- Install Slony for Asynchronous replication
- Master load balancing with PgPool

# **Training program**

Les solutions de haute disponibilité

- High availability under PostgreSQL.
- The different types of replication (synchronous, asynchronous, load balancing).

Le Warm Standby



- Definition of the concept.
- · Setting up master and slave servers.
- Implementing replication.
- · Recovery from an incident .
- Exercise: Implementing a Warm Standby server.

#### La réplication asynchrone avec Slony

- Concepts.
- Installing Slony-I.
- Configuring nodes and server group.
- Defining replication sets.
- Initialization.
- Starting the Slony-I program.
- Creating the table set.
- Modifying the schema.
- Modifying replication sets.
- Changing provider and disaster recovery.
- Exercise: Setting up an asynchronous replication solution with Slony-I tool.

#### Le gestionnaire de connexion : PgPool

- Installing PgPool.
- Installing the system database.
- Installing the administration tool.
- Configuration (pgpool.conf).
- Use cases.
- · Starting PgPool.
- Exercise: Setting up a load balancing solution with PgPool .

#### Les choix stratégiques

- Elements to take into account when defining the architecture.
- · Best Practices.