

Modules Cursus PostgreSQL Administration

Module 1 : PostgreSQL Intro	Module 2 : PostgreSQL Architecture	Module 3 : Server and Database Objects
What is PostgreSQL? PostgreSQL Features User-defined types Table inheritance Sophisticated locking mechanism Foreign key referential integrity Nested Transactions and Savepoints Multi-version Concurrency Control Asynchronous replication Install and Connect to PostgreSQL pgAdmin Application and psql Shell	Shared Memory Shared and WAL Buffer PostgreSQL Process Types Postmaster Daemon Process Background Processes Backend Processes Client Processes Database Structure Create User Database What are Tablespaces? What is Vacuum?	Server Service Database Object Table Object and Schema PostgreSQL Tablespaces pg_default and pg_global View as Virtual Tables Functions and Operators Server Configuration Logging Parameters Memory Parameters WAL Parameters
Module 4 : Backup and Restore	Module 5 : Indexes	Module 6 : Database Management
PostgreSQL Backup Tools pg_dump and pg_dumpall Point-in-Time Database Restoration Setting up WAL archiving Data and/or Structure pg_dump Parameters Backup Object Definitions pg_restore and psql Ignore and Stop on Errors pg_store Parameters Restore only Structure	What are Indexes? Index Types B-Tree, Hash, GiSY GIN and BRIN Index Differences Create and Drop Index List indexes Unique Index Index on Expression Partial index and Reindex Multicolumn Indexes	Options to Create Databases Modify Databases Rename Databases Change Owner and Tablespace Change Session Defaults Delete Databases Check Activity with pg_stat_activity Copy a Database Using pg_dump Get Database Object Sizes Using pg_size_pretty
Module 7 : Role Management	Module 8 : Securing PostgreSQL	Module 9 : Cluster Management
Access Permissions pg_hba.conf file Creating PostgreSQL Roles Privileges and Restrictions superuser Login Privilege pg_roles System Catalog Role Attributes Groups Role Membership User Role and Group Inheritance	Client Authentication Control Rule Specification Server Configuration Changing Parameters Role Strategies Super User Management Data Encryption One and Two Way Encryption pg_crypto Logging pg_stat_statements Module	High Availability Cluster Performing Replication Primary Server Promoting Standby Server Load Balancing HAProxy Configuration Xinetd Setup HAProxy in ClusterControl Reslaving Standby Server Chained Replication Keepalived