



PostgreSQL DBA Training with Azure


SQL SCHOOL
— Learn SQL. Build Your Future. —

	TRAINING MODULES	DURATION	CHAPTERS	# OF PROJECTS
PLAN A	- Module 1: PostgreSQL DBA - Module 2: PostgreSQL DBA with Azure Cloud	6 Weeks 	1 to 20 	One 
PLAN B	- Module 1: PostgreSQL DBA - Module 2: PostgreSQL DBA with Azure Cloud - Module 3: Advanced DBA (Cloud, On-Premises)	8 to 9 Weeks 	1 to 31 	Two 


EXPERT TRAINERS
Learn from Industry Experts


REAL-TIME PROJECTS
Hands-on Industry Projects


JOB-READY SKILLS
Build Skills Employers Value


ENROLL NOW
STEP INTO A BETTER FUTURE!

PostgreSQL DBA Training with Azure

Module 1: PostgreSQL DBA Concepts

Ch 1: PostgreSQL Introduction

- Database Concepts
- DBA Job Roles
- PostgreSQL DBMS
- Postgres Features
- Postgres Editions

Ch 2: Installation & Setup

- Installing PostgreSQL on Linux
- Installing PostgreSQL on Windows
- Package-based Installation
- Source Installation
- PostgreSQL Directory Structure
- Initial Cluster Creation
- Start, Stop & Restart using pg_ctl
- Managing PostgreSQL using systemctl

Ch 3: Database Administration

- Creating Databases
- Managing Schemas
- Tablespaces
- Roles & Users
- Privileges & Permissions

- Default Privileges

Ch 4: Configuration Management

- postgresql.conf
- pg_hba.conf
- pg_ident.conf
- Configuration Reload vs Restart
- Parameter Classification
- Memory Configuration
- Logging Configuration

Ch 5: Security Management

- Authentication Methods
- SSL Basics

Ch 6: PostgreSQL Architecture

- PostgreSQL Process Architecture
- PostgreSQL Storage Architecture
- System Catalogs

Ch 7: Tools & Utilities

- psql
- pgAdmin
- createdb
- dropdb
- createuser
- dropuser

Ch 8: Backup & Recovery

- Logical Backup
- pg_dump
- pg_restore
- pg_dumpall
- Physical Backup
- Base Backup (pg_basebackup)

Ch 9: WAL Fundamentals

- WAL Architecture
- WAL Files
- Checkpoints
- WAL Configuration

Ch 10: Routine Maintenance

- VACUUM
- VACUUM FULL
- ANALYZE

- AUTOVACUUM
- REINDEX
- CLUSTER
- MVCC
- Maintenance Best Practices

Ch 11: Monitoring

- pg_stat_activity
- pg_stat_database
- pg_locks
- pg_stat_user_tables
- pg_stat_statements
- Session Monitoring

Ch 12: Extensions

- pg_stat_statements
- pg_buffercache
- postgres_fdw
- pg_repack
- pgstattuple
- uuid-osp

Module 2: PostgreSQL Administration in Cloud (Azure)

Ch 13: Cloud Fundamentals

- IaaS
- PaaS
- SaaS
- Managed PostgreSQL

Ch 14: Introduction to Azure Database for PostgreSQL

- Overview of Azure Database Services
- PostgreSQL on Azure Architecture
- Deployment Models

Ch 15: Azure Postgres DBA: Flexible Server

- Creating Flexible Server
- Compute and Storage Options
- Networking Configuration
- Start/Stop Server
- Cost Optimization

Ch 16: Azure Postgres DBA: Single Server

- Single Server Architecture

- Features and Limitations
- Single Server vs Flexible Server

Ch 17: Azure Postgres DBA: Backups

- Automated Backups
- Backup Retention Period
- Point-in-Time Recovery (PITR)
- Restore Operations
- Backup Monitoring
- Backup Best Practices

Ch 18: Azure Postgres DBA: Migration

- Azure Database Migration Service (DMS)
- Migration using pg_dump and pg_restore

Ch 19: Azure Postgres DBA: Monitoring

- Metrics and Alerts
- Performance Dashboard
- Query Performance Insights

Ch 20: Azure Postgres DBA: High Availability and Replication

- HA Architecture
- Read Replica
- Replica Creation
- Failover Process
- Disaster Recovery (DR)

Module 3: PostgreSQL Advanced Administration

Ch 21: Advanced Backup & Recovery Strategies

- WAL Archiving
- Point-in-Time Recovery (PITR)
- Recovery Targets
- pgBackRest/Barman
- Backup Scheduling using Cron Jobs

Ch 22: Performance Tuning - 1

- PostgreSQL Optimizer
- Query Planner
- EXPLAIN
- EXPLAIN ANALYZE
- Buffer Usage

Ch 23: Performance Tuning - 2

- Cost Estimation

- Slow Query Analysis
- Index Optimization
- Execution Plans
- Join Strategies
- Parallel Queries

Ch 24: Indexing

- B-tree
- Hash
- GIN
- GiST
- BRIN
- Expression Indexes
- Partial Indexes
- Covering Indexes (INCLUDE)
- Concurrent Index Creation

Ch 25: Vacuum Internals

- Dead Tuples
- Autovacuum Internals
- Bloat Analysis

Ch 26: Locking & Wait Events

- Lock Types
- Deadlocks
- Blocking Sessions
- Types of Wait Events
- Transaction Isolation Levels

Ch 27: Replication

- Streaming Replication
- Logical Replication
- Synchronous Replication
- Asynchronous Replication
- Cascading Replication
- Replication Lag Monitoring

Ch 28: High Availability

- Failover
- Switchover
- Automatic Failover (pgpool-II / Patroni)
- Disaster Recovery (DR)

Ch 29: Partitioning

- Range
- List

- Hash
- Partition Pruning

Ch 30: Upgrades

- Minor Version Upgrade
- Major Version Upgrade
- pg_upgrade
- Best Practices Upgrade
- Rollback Planning

Ch 31: Enterprise Monitoring

- Prometheus
- Grafana
- pgBadger

Thank You!

Your Journey to Becoming a PostgreSQL DBA Starts Today!

Congratulations on Taking the First Step Toward a High-Paying Database Career.

With consistent practice, real-world projects, and expert guidance, you'll be ready to confidently manage enterprise PostgreSQL databases on-premises and in the cloud.

What You'll Gain

- ✓ PostgreSQL Administration Expertise
- ✓ Azure PostgreSQL Cloud Skills
- ✓ Backup, Recovery & High Availability
- ✓ Performance Tuning & Query Optimization
- ✓ Enterprise Monitoring & Security
- ✓ Real-Time DBA Projects
- ✓ Resume Building & LinkedIn Optimization
- ✓ Interview Preparation & Mock Interviews
- ✓ Lifetime Learning Community



Quality Training Assured

20+ Years of Trust | ISO Certified | MSME Registered

Trained 1,00,000+ IT Professionals



PostgreSQL



Microsoft Azure

READY TO JOIN THE NEXT BATCH?

Scan the QR Code to Register



Thank You!

Your Journey to Becoming a PostgreSQL DBA Starts Today!

Congratulations on taking the first step towards mastering PostgreSQL Administration with Azure & AI. With dedication, practice and expert guidance, you are now on the path to a successful and high-growth database career.



CONTACT SQL SCHOOL

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WHAT YOU WILL GAIN

- PostgreSQL Administration Expertise
- Azure PostgreSQL Cloud Skills
- Backup, Recovery & High Availability
- Performance Tuning & Query Optimization
- Enterprise Security & Monitoring
- Real-Time DBA Projects
- Resume Building & LinkedIn Optimization
- Interview Preparation & Mock Interviews
- Certification Guidance
- Lifetime Learning Community Support

LEARN • PRACTICE • BUILD • SUCCEED

- 20+ YEARS OF TRUST
- ISO 9001:2015 CERTIFIED
- MSME REGISTERED (Govt. of India)
- 100% PRACTICAL HANDS-ON TRAINING
- STEP-BY-STEP LEARNING APPROACH
- CAREER GUIDANCE & PLACEMENT SUPPORT

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Ready to Join the Next Batch?

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