

Complete Practical: Real-time Job Oriented Training

PostgreSQL DBA with Azure

Thank you for contacting our **SQLSchool** Training Institute. We assure you 100% Practical, step-by-step training on **PostgreSQL DBA** Training.

Who we are?

Over 19 Years of strong commitment in training excellence, we assure you a 100% practical, step-by-step learning process paired with Assignments, Use Case Scenarios, and real-time project Implementations for your Resume and Job Work. We are sure you will have a wonderful journey with us.

Details of our PostgreSQL DBA Training

What is Postgres?

Postgres is a open-source Platform to store, manage, and administer databases.

Very easy and versatile. Easy to manage and operate.

What is a PostgreSQL DBA Job Role?

A PostgreSQL Database Administrator (DBA) manages, maintains, and optimizes PostgreSQL database systems. **Key Responsibilities include:**

- 1. Database Administration
- 2. Performance Tuning
- 3. Backup and Recovery
- 4. DB Security
- 5. Upgrades and Migrations
- 6. Database Design
- 7. Monitoring and Maintenance
- 8. Cloud Migrations
- 9. Cloud Management
- 10. Cloud Security & HA DR, more.

Who can join this course?

For Free Demo, Latest Schedules, call us on +91 96666 40801 or visit www.sqlschool.com/register

- 1. Existing Other Database Administrators (DBA)
- 2. Database Developers.
- 3. System Administrators.
- 4. Data Analysts/Scientists.
- 5. IT Professionals.
- 6. Students.
- 7. Developers
- 8. Data Engineers
- 9. Anyone who wanted to step into / start career in Database Platform

What about the Lab? What are the System Requirements?

Here are the system requirements to install PostgreSQL:

Hardware Requirements:

- 1. RAM: 8 GB or Higher
- 3. Storage: 10 GB or more of free disk space

Software Requirements:

Operating System: PostgreSQL supports various operating systems, including:

- Linux (Ubuntu, Red Hat, CentOS, etc.)
- Windows (10, 8, 7, Server 2019, etc.)
- macOS (10.12 or later)
- FreeBSD / OpenBSD / Solaris

What about Placement Assistance?

We train you with step-by-step activities, concept wise FAQs and Answers. Resume Guidance and Placement Assistance part of this PostgreSQL DBA Course.

How do I join the course?

Reach us for a free demo on +91 9666440801 or visit us on www.sqlschool.com/schedules

Training Options (Plans):

| | Modules | Chapters Included | Duration |
|---------------------------|-------------------------------------|-------------------|----------|
| PostgreSQL DBA Plan A | 1. PostgreSQL DBA | Chapters 1 to 30 | 6 Weeks |
| PostgreSQL SQL DBA Plan B | PostgreSQL DBA Azure PostgreSQL DBA | Chapters 1 to 45 | 8 Weeks |

Module 1: PostgreSQL DBA

| Ch 1: Intro to PostgreSQL | Ch 2: Installation | Ch 3: Config & File Structure |
|-----------------------------|------------------------------|-------------------------------|
| ✓ Overview & Use Cases | ✓ Windows Setup Steps | ✓ Data & Base Directory |
| ✓ PostgreSQL History & | ✓ Linux via Yum/RPM | ✓ PostgreSQL.conf Overview |
| Growth | ✓ Source Code Installation | √ pg_hba.conf & |
| ✓ Core Features & Licensing | ✓ Contrib Module | Authentication |
| ✓ Architecture Highlights | Installation | ✓ File System Structure |
| | | |
| Ch 4: DB Cluster | Ch 5: Architecture | Ch 6: Objects & Privileges |
| ✓ Initdb & Cluster Setup | ✓ Postmaster Process Flow | ✓ Create/Drop DB & Users |
| ✓ Start/Stop/Reload | ✓ Backend Utility Processes | ✓ Schema Management |
| Commands | ✓ Shared Memory Segments | ✓ Search Path |
| √ Windows & Linux Cluster | ✓ Memory Components | Configurations |
| Demos | Explained | ✓ Grant & Revoke |
| ✓ Systemctl Integration | | Commands |
| Ch 7: Tools & Catalog | Ch 8: CRUD Operations | Ch 9: Tablespaces |
| √ psql Command Line Usage | ✓ CREATE TABLE Syntax | √ Tablespace Concepts |
| √ pgAdmin GUI Operations | ✓ INSERT, UPDATE, DELETE | √ pg_default & pg_global |
| √ pg_catalog Schema | ✓ TRUNCATE vs DELETE | ✓ Create/Drop Tablespaces |
| Insights | ✓ Data Types & Constraints | √ Temporary Tablespace |
| ✓ Metadata & Info Schema | | Use |
| | | |
| Ch 10: Backup & Restore – I | Ch 11: Backup & Restore – II | Ch 12: MVCC |
| ✓ Logical Backups | √ pgBackRest Utility | ✓ What is MVCC? |
| (pg_dump) | ✓ Configure PITR Steps | ✓ MVCC Transaction Flow |
| √ Restore with pg_restore | ✓ Timeline & WAL Archives | ✓ Data Structures & |
| √ Online vs Offline Backups | ✓ Restore PITR Scenarios | Snapshots |
| √ pg_basebackup Overview | | ✓ Transaction ID |
| | | Wraparound |

| Ch 13: Maintenance & | Ch 14: Joins & Constraints | Ch 15: Indexes | |
|-----------------------------|-----------------------------|-------------------------------------|--|
| Vacuum | √ Join Types (INNER, | ✓ B-Tree Index Structure | |
| ✓ VACUUM Types | OUTER) | √ Hash & Expression | |
| ✓ ANALYZE Command Use | ✓ Primary & Foreign Keys | Indexes | |
| √ Clustering Tables | ✓ NOT NULL & UNIQUE | ✓ GiST & SP-GiST Indexes | |
| √ Auto-Vacuum Settings | Constraints | ✓ GIN & BRIN Use Cases | |
| | ✓ ER Diagrams Overview | | |
| Ch 16: Performance Tuning – | Ch 17: Performance Tuning – | Ch 18: Data Loading | |
| 1 | II . | √ COPY Command Usage | |
| √ VACUUM & Partitioning | ✓ shared_buffers & | √ pgloader Configuration | |
| ✓ Query Plans (EXPLAIN) | work_mem | ✓ Import/Export Data Sets | |
| √ Index Usage Analysis | ✓ effective_cache_size | ✓ Use of FDWs | |
| ✓ Subquery Optimization | Setup | | |
| | √ pg_stat Monitoring | | |
| | ✓ CPU, RAM & Storage | | |
| | Tuning | | |
| Ch 19: Extensions | Ch 20: HA & Replication – I | Ch 21-22: HA & Replication – | |
| √ Overview of Extensions | ✓ Streaming Replication | II | |
| √ Installing Extensions | Setup | √ Logical Replication Basics | |
| ✓ Common Examples | √ Master & Standby Config | √ Configure | |
| (postgis, hstore) | √ Manual Failover Process | Publishers/Subscribers | |
| √ Managing Extensions | √ promote Command Demo | √ Auto Switchover | |
| | | Techniques | |
| | | ✓ Sync vs Async Modes | |
| Ch 23-24: HA Tools & | Ch 25-26: HA & DR | Ch 27: Tuning & Partitioning | |
| Software | Strategies | ✓ Configurable Parameters | |
| √ pgpool Setup & Load | ✓ DR Concepts & Objectives | \checkmark Partition Types (List, | |
| Balancing | ✓ Multi-Master Replication | Range) | |
| √ repmgr Cluster | ✓ PITR as DR Strategy | ✓ Partitioning Strategy | |
| Management | ✓ DR Tools & Integration | ✓ Performance Impact | |
| ✓ Patroni with etcd/Consul | | | |
| √ Failover Automation | | | |

| ing ana Integration |
|------------------------|
| ana Integration |
| |
| tat_statements |
| dger Reports |
| Time Monitoring |
| |
| 1 |

Module 2: Azure PostgreSQL DBA

| Ch 31: Migration to | Ch 32: PostgreSQL Upgrades | Ch 33: Monitoring & | |
|--------------------------------------|------------------------------|-------------------------------------|--|
| PostgreSQL | √ Upgrade Options | Reporting | |
| √ Manual SQL Migration | √ Minor vs Major Upgrade | √ Grafana Integration | |
| √ pg_dump & restore | √ pg_upgrade Tool | √ pg_stat_statements | |
| \checkmark Migration via DMS Tools | √ Post-upgrade Validation | √ pgBadger Reports | |
| √ 3rd Party Migration Tools | | ✓ Real-Time Monitoring | |
| Ch 34: Azure Cloud | Ch 35: PostgreSQL in Azure | Ch 36: PostgreSQL | |
| Fundamentals | √ Benefits of Azure Platform | Deployment Options | |
| √ Cloud Concepts (laaS, | ✓ Cost & Security | √ Azure VM-based | |
| PaaS) | Advantages | PostgreSQL | |
| ✓ Azure Subscriptions | √ High Availability Features | √ Azure DB for PostgreSQL | |
| √ Azure Services for DBAs | √ Scalability Options | (PaaS) | |
| √ Deployment Models | | √ Azure Kubernetes with PG | |
| | | ✓ Decision Making: When to Use What | |
| Ch 37: CRUD in Azure | Ch 38: Migration to Azure | Ch 39: Azure Backups | |
| PostgreSQL | ✓ Azure DMS Setup | ✓ Azure Native Backup | |
| ✓ Create & Drop DB/Users | √ ADF for Data Transfer | Options | |
| ✓ CRUD Query Syntax | ✓ Manual vs Tool-based | ✓ Enabling Auto Backups | |
| ✓ Access Control | Migration | √ Snapshot Configurations | |
| √ pgAdmin in Azure | √ 3rd-Party Tool Integration | ✓ Backup Retention Policies | |
| | | | |

Ch 40: Restore in Azure **Ch 41: Performance Tuning** Ch 42: Azure High **Availability** in Azure ✓ PITR Setup in Azure √ HA Deployment ✓ Query Tuning Tools ✓ Manual Restore via Portal **Architectures** ✓ PostgreSQL Server √ Using pg_restore in Azure ✓ Azure Built-in HA Services **Parameters ✓ DR Restore Scenarios** ✓ Auto-Scaling Best ✓ Third-party HA Tools **Practices** √ Failover Config & Testing √ Monitoring Metrics Ch 43: Azure Disaster Ch 45: Ch 44: Recovery (DR) **Real-time ✓ DR Architecture &** Resume **Strategies** Guidance, **Project** ✓ PITR & Backup DR Use √ Azure DR Tools Mock ✓ DR Automation Best **Practices** Interview Questions

contact@sqlschool.com

New batch Schedules: www.sqlschool.com/Register Call/WhatsApp: +91 966644 0801, +91 966664 0801

Trainer: Mr. Praveen Tholeti

Profile: www.sqlschool.com/Postgres-Trainer-PraveenSir



This PostgreSQL DBA Course is 100% Practical, Step by Step. Reach us now!