NAGARAJU NAMPALLY

Lead Database/Site reliability Engineer

Phone: 909-353-3280 | Email: nampraj13@gmail.com

<u>LinkedIn</u> | <u>GitHub</u>

Results-driven Database Engineer/Reliability Engineer, with an emphasis on PostgreSQL. 8+ years of experience in cloud and on-prem database administration, performance tuning, and high availability solutions. Skilled in automating database systems and improving operational efficiency with AWS, Azure, and GCP. Expertise in Site Reliability Engineering, system reliability, disaster recovery, and cloud database migrations. 4+ years of experience focused on improving system reliability, uptime, and operational efficiency through DevOps principles, automation, CICD and cloud technologies.

Areas of Expertise:

PostgreSQL Development/Administration/High Availability

Optimization

Kubernetes & Containerization (Microservices)
 Observability and Monitoring

Database Reliability & Performance Tuning
 Disaster Recovery and Business Continuity

Cloud Migrations
 Infrastructure as Code (IaC)

Multi-Cloud Architecture & DevOps
 Security, Identity, and Compliance

TECHNICAL EXPERTISE

Databases: PostgreSQL, MySQL, Oracle11g, Redshift, Big Query, MongoDB, Cassandra Redis,

SQL Server, Timescale,

CNCF Landscape: Ansible, Chef, Terraform, Kubernetes

Cloud Landscape: VPC, EC2, EBS, RDS, DMS, Route53, S3, VPC Endpoints, CloudWatch, API Gateway,

IAM, Lambda, Storage Gateway, DynamoDB, Boto3, ECS, Azure SQL, Cloud

SQL,EKS.

Tools: Jenkins, Git, GitHub, Dockers, Elasticsearch, Prometheus, Grafana, Docker, jfrog

Scripts & Languages: Python, Shell, SQL, PL/pgSQL, GO
Version Control & CI/CD: Git, GitHub, Jenkins, Docker

PROFESSIONAL EXPERIENCE

Lead Database Consultant May 2025 – Present ADP Inc. Pasadena, CA

As a Database Consultant, I lead initiatives to improve database performance, streamline operations, and drive automation across the database lifecycle. My focus is on observability, reliability, and operational efficiency to support high-volume, mission-critical systems.

- Monitoring database health and performance using tools like CloudWatch, Dynatrace, and Grafana
- Performing query optimization, parameter tuning, and index management for PostgreSQL databases
- Automating maintenance workflows such as vacuuming, reindexing, backups, and alerting using Python, Bash, and Terraform
- Managing CI/CD pipelines for database deployments using Jenkins and GitHub Actions
- Collaborating with DevOps teams to maintain and improve infrastructure-as-code practices using Terraform and Ansible
- Troubleshooting incidents, conducting root cause analysis, and implementing permanent fixes
- Leading efforts around HA/DR strategy design, database failovers, and backup validation
- Supporting database migrations and upgrades with minimal downtime
- Participating in capacity planning and cost optimization reviews for cloud-hosted databases.

As a **Sr Database/Site reliability Engineer**, responsible for design, install, configuration, maintenance, and performance managing to be ensuring performance optimization, and maintaining high availability Database clusters. Performed upgrades, backups, disaster recovery, and schema refreshes. Worked on database tuning, indexing strategies, and automation using shell scripts.

- Designed and managed highly available, fault-tolerant PostgreSQL clusters across AWS, GCP, and Azure.
- Automated database health checks, scaling, and backup processes using Terraform, Chef, and Python.
- Led cloud database migrations, optimizing performance, cost, and resilience.
- Migrated MySQL to AWS cloud with zero downtime and upgraded from 5.7 to 8.
- Implemented multi-region disaster recovery solutions with automated failover mechanisms.
- Championed CI/CD and DevOps practices using open-source tools. Provided technical leadership and integrated processes with unified pipeline in development of automation using Containers and Kubernetes orchestration, reducing internal software releases (go-live) from 3 months to 7 days.
- Developed custom Lambda functions for RDS lifecycle management and security automation.
- Developed automation scripts for password rotation, schema changes, and monitoring.
- Improved observability by integrating Grafana, Prometheus, and CloudWatch for proactive monitoring.
- API Development: Built APIs and custom dashboards (Flask) for real-time database monitoring and metadata access.
- Designed and maintained Dockerfiles with multi-stage builds for optimized container images. Deployed, managed, and scaled production applications using Kubernetes (K8s) while troubleshooting pod, networking, and storage issues using kubectl, logs, and monitoring tools.On-Call Support: Provided 24/7 on-call support, resolving incidents and addressing user concerns proactively.

Sr PostgreSQL DBA/AWS Solution Architect (Lead) Synapsis Inc. (T-Mobile, Deloitte)

Aug 2018 - July 2021

As a **PostgreSQL DBA/AWS Solution Architect**, responsible for designing, installing, configuring, and managing highly available database clusters while ensuring performance optimization and disaster recovery solutions.

- Developed and optimized PostgreSQL queries, stored procedures, and schema designs to improve performance.
- Built high-scale data pipelines for migrating SQL Server and Oracle DB to PostgreSQL on AWS RDS.
- Resolved database performance and scalability issues using query tuning and indexing strategies.
- Designed and implemented PostgreSQL HA & DR solutions using multi-AZ failover and cross-region replication.
- Created automated DevOps pipelines for database deployments and schema management using Terraform.
- Optimize AWS costs by selecting cost-effective services and architectures, implementing cost monitoring, and offering recommendations for cost reduction and saved 200k/Month.
- Implemented PostgreSQL partitioning, and streaming replication for scalability.
- Developed monitoring dashboards with ELK Stack & Prometheus to track query performance/system health.

PostgreSQL DBA PVR America

Oct 2017 - Aug 2018

Database administrator - responsible for managing all aspects of the PostgreSQL databases (cloud and on-premises).

PostgreSQL DBA Global Data Mart

May 2016 - Oct 2017

Database Administrator, experienced in administering and maintaining enterprise/opensource database servers on Linux/Windows servers.

EDUCATION

Master's degree in information technologies and management - Campbellsville University, KY

NOTABLE ACHIEVEMENTS

- Automated database operations, reducing downtime by 30% using Python, Terraform, and Chef.
- AWS cloud migration.
- Led successful cloud migrations to AWS RDS and Azure SQL, improving performance, resiliency, and cost efficiency.
- Achieved 99.99% uptime for critical cloud databases using high availability and disaster recovery techniques.
- Improved PostgreSQL query execution times by 40% through indexing, partitioning, and performance tuning.
- Developed PostgreSQL-based event-driven architecture, improving real-time data processing in microservices.