

Emanuel Calvo is a Database Platform / Software Engineer with extensive experience across a variety of infrastructures, from Cloud Native to large bare-metal architectures. He focuses on building and designing scalable and resilient data architectures, complex troubleshooting, performance optimizations, and enterprise-grade procedures for long-term projects. His diverse skill set spans a range of technologies, including PostgreSQL, MySQL/MariaDB, Oracle, MongoDB, and more. Active development in Go, Python, C, PL derivatives, and Bash. Building OCI images for production systems has been one of the core tasks, using Earthly now. During the past year, he has been working on building scalable and programmatic IaC, through Ansible, CDK, Hashicorp tools, and Kubernetes. Consensus-based HA, completely automated (including backups and monitoring) and split-brain free.

Skills Databases: **PostgreSQL**, and **MySQL**. Backend and Tooling Development, commonly in **Python**, **Go**, **Bash**, and some C for Postgres extensions. Considerable experience on Linux/BSD Operating Systems. IaC/CI/CD generally with **Terraform**, **Earthly**, GH/GL integrations, **Kubernetes**, etc.

Experience

OnGres | Principal Database Engineer — Madrid, Spain – 2017- Present

Database Platform Engineering (DBPE) and Professional Services Technical Lead (PSTL)

As a Database Engineer, these have been the projects he was involved:

- Built OCI in CI/CD pipelines for **StackGres** (a **Kubernetes** Operator with consensus based HA, integrated pool, etc), product research and development.
- Live migration from on-premises **Oracle** to a cloud infrastructure based on **GCP**, **Postgres**, **Patroni**, **Consul**, **Ansible** and **Spinnaker**, for the core authentication component in the BBM (Blackberry Messenger, around 100M accounts) application with a modern HA implementation.
- Former member of the **Gitlab's Architecture Team**, for scaling Production platform consisting in a Modern HA architecture with Postgres under Patroni Framework, Consul and a scalable Pool layer.
- Part of the **AWS BabelfishPG** Team, as a **Developer Advocate**. Package distribution building, testing and CI. See <http://babelfishpg.org>.
- Provided Data DevOps Architecture Design and Production Performance Analysis and Support for **Gitlab**, **PSMA**, **Milestone**, **Paxful**, **Packet**, **ARM**, Postmates, Conrad, eSentire, across other customers.

As the Professional Services Tech Lead, he has the following responsibilities:

- Account management and assessment of customer projects.
- IaC, supporting several Cloud Providers and platforms, automating everything around the data core, scaling and reliability.
- Delivered training for developers at all levels for companies like AWS, Amex, Microsoft, among others.

Past Experience

ViaDB | Founder – 2015 - 2022

ex-Founder of **ViaDB.ar** consulting firm, for services around a cherry picked data stack (Postgres, MySQL, Elastic, Clickhouse). This project has been discontinued.

Percona | Senior MySQL DBA – 2016-2017

Member of Pod Atlas, under the Managed Services Department. Implementation and maintenance of customer's critical infrastructures based on MySQL and forks. Some of the customers: Shipwire, Fitbit, Hyperwallet, Lookout.

Pythian | Database Consultant – 2015-2016

- Member of the Advanced Consulting Team Group (PostgreSQL).
- Technologies: MySQL/MariaDB, xtraDB, Galera, Docker, Ansible, MongoDB, PostgreSQL, Vertica, Oracle.
- Customers: Microsoft, Beats (Apple), Adobe Echosign, Fitbit, Sendgrid, Mozilla Foundation, Zendesk, among others.

2ndQuadrant | PostgreSQL Consultant (now **EDB**) – 2014-2015

Advanced PostgreSQL consultant, Postgres community patches testing/review and training. Some of the customers this position is related to: AXLE Project, Box, Atlassian, Jampp, System One NOC/BTS.

Blackbird | Operational DBA (now part of **Pythian**, former **PalominoDB**) – 2012-2014

- Primary DBA/Teach Lead of the PostgreSQL and PostgresXC databases. MySQL/forks.
- AWS experience. EC2, RDS, S3, LB, EBS, Redshift, DynamoDB, AWS API.
- Scripting/development: Python, Perl, PL/PgSQL and bash.
- Customers: Fitbit, Zendesk, Pinterest, AT&T, Chegg, Edmodo, SendGrid, among others.

Aedgency | DBA – 2010-2012

- MySQL/Oracle database administration. Query tuning and performance.
- ETL integration between databases and PL/SQL development.
- Sphinx configuration, maintenance and monitoring.

SIU | Database Consultant – 2009-2010

Provided trainings, support and consulting for Public Universities (UNLP, UNC, UNNE, UNNOBA, UNCU, UNPA, UNR, among others). Data modelling, developer's support, application compliance and Database Architecture.

Globant | SysAdmin Unix – 2009

Maintained a platform consisting in Oracle database 10, Apaches and Tomcats (VAP, VCM) Clustered, with several stages of deploy. Main tasks were related to deploys, environment configuration, VMWare Infrastructure Client maintenance, Python scripting and some Database tasks.

Correo Argentino | SysAdmin Linux & Postgres/Developer – 2007-2009

Started from the Application Support role (Huenei) and PHP Developer (Siemens) and ended up as a SysAdmin for the production platform.

Education and Trainings

ESBA, Buenos Aires, Argentina – Programmer 2008

EDB Certified Professional 11

EDB Associate Certification 9.4 – EDB33986

MongoDB for DBAs – M102

Microsoft Azure Associate (Database Engineer) and MCT

Community Projects

CanalDBA – Founder – (2019-2023) Argentina/Uruguay DBAs Community (Spanish spoken).

Fundación Apolo – IT Director – Transparency in Democracy and Liberty Rights.

Fundación Oportunidades – IT Director – See <https://oportunidades.org.ar>

Universidad del Este de la Plata (2017) – Database Course Professor