



CUSTOMER SUCCESS STORIES

Indiana's Office of Technology Services Drives Legislative Efficiency and Transparency with EDB Postgres[®] AI





CUSTOMER: INDIANA'S OFFICE OF TECHNOLOGY SERVICES

EDB customer since February 2018

Mitch Baker

Senior Linux Engineer, Office of Technology Services, Indiana Legislative Services Agency

CHALLENGE: Indiana's Office of Technology Services faced increasing workloads and needed to migrate to a more robust and scalable system that could handle larger amounts of data.

EDB SOLUTIONS: EDB Remote DBA Service

RESULTS: Using Postgres met the agency's security and scalability objectives while keeping costs down. With help from EDB's Remote DBA Service, OTS was able to expedite deployment and optimize the performance of its Postgres solution.



OVERVIEW

The Office of Technology Services depends on consistent, reliable, and expert Remote DBA Service to support the executive branch of state government

Like many government organizations that have digitized their processes and legislative materials, members of the Indiana General Assembly rely on a nonpartisan legislative services agency (LSA) for fiscal analysis; bill drafting and research; revision of statutes; and publications to the legislature, media, and the general public. [The Office of Technology Services \(OTS\)](#) within Indiana's LSA is largely responsible for building and supporting the digital applications used by legislators and their staff and for providing the hardware, software, and connectivity required to uphold the legislative process.



Indiana Legislative Services Agency (ILSA) has been a Postgres® user and an EDB Remote DBA Service customer for more than six years. Postgres and Remote DBA were the perfect solutions for the agency's database needs, since data and workloads handled by OTS had continued to increase, requiring OTS to migrate its subversion (SVN) and MySQL repository to a more robust and scalable system. Having managed a wide array of database technologies over his career, OTS's Senior Linux Engineer Mitch Baker knew PostgreSQL was the ideal solution for meeting the agency's collaboration, security, and transparency objectives while keeping costs down.

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Maximizing the power of Postgres with Remote DBA

OTS’s plan was to implement EDB Postgres Advanced Server and migrate to an open source solution on its own. But shortly after starting the 5:00 a.m. cutover one morning, Baker realized this would be a massive undertaking without external support. That’s when OTS decided to use the professional services offered by EnterpriseDB (EDB).

With EDB’s help, OTS was able to expedite deployment and optimize the performance of its Postgres solution. The OTS team found EDB’s expertise and proactive assistance to be so valuable that they decided to continue using the services for ongoing proactive support, with Remote DBA for monitoring, managing, and maintaining OTS production databases for the long term. Remote DBA provides a wide range of valuable services, including continuous monitoring and tuning of database configuration settings; regular performance assessments to identify potential issues before they impact production; and implementing best practices for database maintenance, such as vacuuming, index maintenance, and database reorganization.

Among other tasks, EDB significantly restructured the architecture, upgraded to the latest version of Enterprise Postgres, moved to a logical replication setup to alleviate customer pain points, fine-tuned Pgpool configurations to minimize backend down issues, and simplified management. As a result of these efforts, ILSA now has a much more stable environment.

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Optimizing queries had a huge impact on database performance. “EDB helped OTS with a set of queries that were recursive and cut down the total load time of a certain page by almost 70%,” says Baker.

Zero 2:00 a.m. calls

From quarterly checks of OTS's backups to 24/7 monitoring, EDB's DBA team helps ensure that OTS's entire system is running smoothly, proactively responding to events before they become issues.

"The primary objective for both our teams is to make sure the database is running. And if a backend service drops off Pgpool, or one of the backup databases or replications isn't working properly, our relationship with the RDBA team has evolved to the point where they know they can fix that without calling me first," says Baker. "They know that I want things working. Waiting for me to say, 'OK, do it' is downtime we don't want."

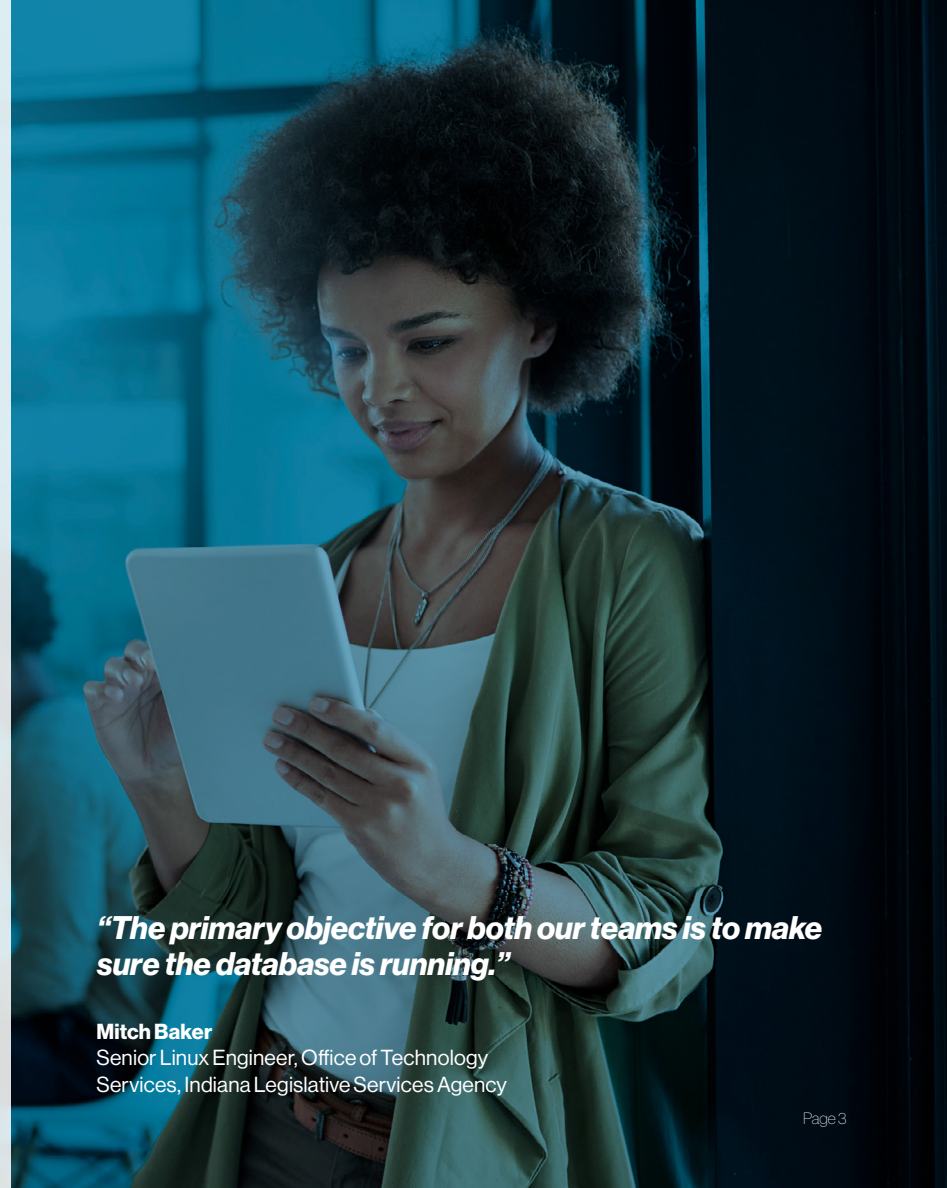
Transparency fuels public trust

As OTS has grown vertically, EDB's DBA team has helped add more database servers on the Pgpool side to balance and spread the load across different servers for seamless performance when the legislature is in session.

"We're a government agency," says Baker, "so we're supposed to be transparent. If a person clicks on a link to look at a bill and it takes what they consider to be an excessive amount of time to load, then they start wondering, 'What's not being shown? Why are they hiding stuff from us?' So we rely on EDB to make sure we keep that transparency to the constituency within the whole state of Indiana."

Practices that put security first

OTS's security and virtual private network (VPN) policies have also grown throughout the years, and EDB has adjusted practices in order to meet OTS security requirements. Data isolation, granular access through role-based access control, cluster level-specific permissions, encryption and transit encryption at rest, SOC 2 auditing procedures, audit logging, and other practices ensure ongoing compliance with stringent security regulations.



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Increase efficiency, decrease costs

Baker and his team continue to experience both cost and time savings by partnering with EDB's remote DBA team. "The RDBA team is not just focused on the databases themselves," he says. "We have a Barman server for our backups. We have a Postgres Enterprise Manager (PEM) server for our internal look at things. We also have a couple of Pgpool servers that are running, and then on top of that, within the database structure itself, the enterprise Failover Manager. They maintain all that for me."

"There's no way, with my other duties there at OTS, to be able to sit and monitor and respond to things as quickly as they happen," says Baker. "So we rely on the RDBA team. If we needed to do what the RDBA team does, we would have to hire at least two to three more people."

In addition, OTS's relationship with EDB enables it to scale its services up or down as needed. Because Indiana legislators are only in session from January through March or April, the load goes down at the end of session. OTS turns off several servers at this time and saves money by not needing to pay for databases that aren't being monitored.

Not just a DBA team but an entire open source community

When Baker and his team found a bug in Pgpool, the open source tool that adds connection pooling and other useful features to Postgres, they contacted EDB's DBA team, which alerted EDB's developers, who were able to do work-arounds and find a solution for OTS. With more contributors to the development and success of Postgres than any other organization, EDB has a direct line to experts who can create solutions and patches for issues that arise.

The Remote DBA team is capable of delivering significant savings to EDB customers. According to Global Senior Director of Managed Support Services Kanchan Mohitey, "Utilizing Remote DBA Service eliminates the need for hiring and training in-house DBA staff, resulting in cost savings on salaries, benefits, and overhead. It provides access to a team of experienced PostgreSQL experts at a fraction of the cost of maintaining an in-house DBA team. Additionally, Remote DBA Service offers flexible pricing models, allowing organizations to scale services based on their specific needs and budget constraints."

"EDB's RDBA services have helped us out a lot," says Baker. "They've saved us on several occasions when things weren't working properly. If you don't have the manpower or you don't want to spend the money on the manpower, EDB has the services available. It's been a lifesaver for us."



EDB provides a data and AI platform that enables organizations to harness the full power of Postgres for transactional, analytical, and AI workloads across any cloud, any time. For more information, visit www.enterprisedb.com.