

ONBOARDED IN DAYS, NOT MONTHS: GUITAR CENTER'S SEAMLESS DATA LAUNCH WITH DATACOVES

RETAIL



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Alison Stanton
Staff Data Engineer
Guitar Center Company

GUITAR CENTER'S TECH STACK



CUSTOMER INTRODUCTION

Guitar Center is a leading retailer of musical instruments, gear, and services, dedicated to empowering musicians at every level. With a mission to fill the world with music, the company provides access to a wide range of instruments, recording equipment, live sound, DJ gear, lighting, and essential services such as lessons, rentals, and repairs. Rooted in the belief that music is a unifying and transformative force, Guitar Center supports creativity, connection, and expression through a nationwide network of passionate, music-loving associates.

THE CHALLENGE

Legacy Architecture and Limited Visibility:

Before partnering with Datacoves, Guitar Center struggled with manual processes and outdated architecture that significantly hindered agility and innovation. Legacy tools like Netezza and Informatica resulted in bloated, inefficient stored procedures, some exceeding 2,000 lines of code. These monolithic structures, combined with disconnected workflows and minimal observability, made development and debugging slow and error-prone.

No CI/CD and Automation:

Without a robust CI/CD pipeline, the Guitar Center team faced inconsistent deployments and lacked a reliable mechanism to manage changes. The absence of automation and governance led to manual errors, difficulty in tracking changes, and overall slow development cycles. This made it harder to scale and maintain quality across environments.

Limited Flexibility for Enterprise Growth:

Guitar Center faced challenges due to legacy systems that couldn't keep pace with its evolving enterprise needs. The existing architecture was not built to support dynamic scaling or complex workflows, limiting their ability to adapt quickly. This inflexibility created roadblocks in scaling operations, integrating new tools, and meeting the growing demands of the business, ultimately slowing down innovation and responsiveness.

THE SOLUTION

Guitar Center was looking to modernize their data operations. To do this, they decided to implement dbt and were searching for a dbt-hosted provider with enterprise-level support and infrastructure that could adapt to their growing needs. Guitar Center evaluated dbt Cloud and other dbt-hosted providers but ultimately chose Datacoves for its enterprise-level support, scalable infrastructure, and flexibility to meet growing needs.

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Modernized Architecture with Airflow and dbt Integration:

Datacoves helped Guitar Center rapidly implement a modern data platform by providing managed Airflow and dbt infrastructure. By providing containerized environments for development, UAT, and production, Datacoves made it easy to safely test changes and reduce human error. Teams could switch between environments smoothly, speeding up iteration and making deployments more reliable.

The managed shared Team Airflow environments, as well as developer standalone instances of My Airflow, allowed for efficient development and orchestration of complex workflows. This afforded teams the flexibility to scale operations and manage dependencies with greater autonomy, visibility, and control across the entire data pipeline.

Additionally, by integrating with AWS Secrets Manager to secure connections to multiple Snowflake accounts, Datacoves ensured enterprise-grade security for sensitive information.

Streamlined CI/CD:

Datacoves provided Gitlab CI/CD pipelines with flexible, template-driven configurations that gave Guitar Center consistent version control, automated testing, and reliable deployments. The templates offered a strong starting point while allowing teams to customize and adapt workflows to fit their specific needs. This approach standardized workflow creation, reduced setup time for new projects, and made updating development environments fast and easy. With seamless automation and consistent processes in place, Guitar Center’s data teams could collaborate more efficiently, move faster, and maintain high-quality standards across their projects.

Scalable and Flexible Enterprise Architecture:

Datacoves provided an enterprise-ready architecture built for scalability, flexibility, and ease of management. Backed by Kubernetes, the solution enabled seamless execution of complex jobs and workflows, with the ability to scale quickly as demand grew, without Guitar Center needing to manage the underlying infrastructure. *“Nobody wants to be setting up their own dbt containers and Kubernetes...There’s a whole lot of infrastructure you just don’t have to worry about with Datacoves,”* said Alison

The robust architecture offered enterprise-level support and a strong foundation that allowed the team to customize solutions and accelerate time-to-market without sacrificing performance, security, or reliability. Datacoves’ fully managed approach meant Guitar Center could focus on delivering value rather than worrying about maintenance, upgrades, or scaling challenges.

Additionally, Datacoves demonstrated rapid turnaround on support and feature requests, such as adding Python libraries in hours for Guitar Center, showcasing its responsiveness and commitment to evolving customer needs.

THE RESULT

Faster Development Cycles:

“Datacoves helped us achieve drastic time savings in development cycles, reducing Airflow tasks from months to weeks and dbt development from weeks to days,” said Alison. This acceleration allowed Guitar Center to deliver new data products, features, and enhancements to business stakeholders more quickly than before.

With Datacoves’ ready-to-go infrastructure and built-in best practices, Guitar Center’s data teams could start developing immediately without the typical delays caused by environment setup, tooling gaps, or process confusion.

Standardized workflows, containerized environments, and automated CI/CD pipelines enabled faster iteration, safer deployments, and more reliable releases. By removing technical friction, Datacoves empowered Guitar Center to deliver new data products, features, and insights to business stakeholders much more quickly.

Reduced Costs & Simplified Vendor Management:

Datacoves helped Guitar Center significantly lower its total cost of ownership by consolidating multiple tools and vendors into a single, integrated platform. This streamlined approach simplified vendor management, reduced the burden of maintaining multiple contracts, and minimized overhead costs. By eliminating the complexity of managing disparate tools, Guitar Center achieved greater operational efficiency and cost savings while building a more unified and reliable infrastructure.

Alison emphasized the importance of making decisions based on the total cost of ownership, considering not just the initial license or contract cost but the long-term value of the investment. She noted that when evaluating the five-year TCO, Datacoves clearly delivers a lower overall cost.

Additionally, issues are resolved quickly, with most support cases addressed within 5 minutes to 1 hour. This rapid response accelerated the delivery of business initiatives, improved time-to-value, and boosted overall productivity across the organization.

Faster Onboarding & Seamless Scalability:

Datacoves made onboarding fast and seamless by removing technology as a barrier. New developers could immediately focus on learning the codebase, dbt, and best practices, not fighting setup issues or broken environments. A Staff Data Engineer at Guitar Center raved that Datacoves' onboarding became so simple that a single Confluence page was enough — no confusion, no extra questions, just a smooth, reliable setup:

"Technology isn't the blocker anymore," said Alison.

With standardized environments and flexible architecture, Guitar Center significantly reduced onboarding time and scaled its team more efficiently as business needs evolved.

CONCLUSION

Datacoves partnered with Guitar Center to modernize and streamline their data stack, providing a strong foundation for future growth. As Guitar Center migrated to Snowflake, adopted a new BI platform, transitioned to a star schema data model, and expanded their data ecosystem, Datacoves seamlessly integrated with these changes and supported their evolving architecture without disruption.

By enabling robust CI/CD practices, automated workflows, and enterprise-grade infrastructure, Datacoves removed technical blockers and improved team agility.

Today, Guitar Center operates with a scalable, secure, and cost-efficient data platform. Teams move faster, innovate with confidence, and adapt easily as business needs change, without the burden of managing infrastructure.

WHAT IS DATACOVES?

Datacoves is an enterprise DataOps platform with managed VSCode for dbt development and Airflow. We enable you to implement data management best practices without compromising data security.

We believe in open standards so companies are not locked into proprietary solutions, and we give you the flexibility to "opt out" of parts of our stack.

Find us at datacoves.com