



Banking on speed and security

Bridging decades of legacy systems and modern cloud, Atruvia uses HashiCorp to build secure and compliant infrastructure that powers over 900 financial institutions across Germany

About Atruvia

Atruvia is the IT service provider for Germany's cooperative and private banks, delivering core banking platforms, IT infrastructure, and secure digital services to more than 900 institutions nationwide. With nearly 5,500 employees, the company operates at the core of Germany's financial system, processing over 9.3 billion transactions annually, supporting 91 million customer accounts, and powering 26,000 self-service machines across the country.

Backed by decades of financial technology expertise, Atruvia is continuously modernizing its offerings to deliver faster, safer, and more intuitive digital banking experiences for customers and end users alike.

A legacy of complexity

After decades of growth, Atruvia's tech stack reached a breaking point as the company's infrastructure expanded across datacenters, OpenShift clusters, and public clouds — each with its own tools, processes, and compliance frameworks. Fragmented automation, manual provisioning, and inconsistent governance began slowing delivery and innovation.

What once ensured stability and reach had become a tangled web of dependencies.

To meet the demands of a rapidly evolving digital banking landscape, Atruvia needed to reimagine its foundation, building a system that enables automation, security, and compliance to operate seamlessly across every environment.

When scale meets sprawl

Atruvia's modernization journey began with a familiar challenge: Legacy automation tools that couldn't keep up with the organization's growing scale. While automation technically existed, it relied on a patchwork of disconnected tools and processes that left developers trapped in ticket queues and manual handoffs.

"We were running 250,000 workstations and thousands of virtual machines," said Martin Pelke, Product Owner for Infrastructure as Code at Atruvia. "We were operating with a weird stack of tooling that you fuse together. And it was still always process-oriented rather than product-oriented."

Fragmented automation, ticket-based workflows, and scattered documentation created friction across teams. Developers often waited weeks for new resources, while key infrastructure knowledge remained trapped in silos.

The strain became unsustainable when Atruvia needed to scale its OpenShift footprint from a few clusters to as many as forty. "We had to find a way to automate this and establish the spinning up of new clusters in a very short period of time," said Lukas Essig, Platform Engineer at Atruvia.

The problem wasn't just tooling — it was culture as well. Manual interventions were the norm, leading to off-hour changes, ad hoc fixes, and fragmented ownership that slowed progress and introduced risk. The path forward required a complete shift in mindset, built around a unified automation and security platform.

99% faster cluster provisioning
(3 months → 4 hours)

Deployment time cut from weeks to hours

Compliant pipelines across hybrid environments

900+ banks supported nationwide

Company-wide IaC adoption

15-minute network setup
(down from weeks)

Challenges



Fragmented automation due to isolated tools and manual processes



Critical infrastructure knowledge was trapped in siloes



Ticket-based workflows slowed delivery time and created friction



Scaling demands surged as OpenShift clusters had to expand in a short time



Lack of unified APIs and centralized documentation hindered self-service and reproducibility



Manual intervention created operational risk and resistance to change

From wait times to workflows

Long before the shift to large-scale automation, Atruvia had established a strong security foundation with IBM Vault Enterprise. For years, Vault served as the central secrets manager for Atruvia's on-premises applications, securing credentials, managing access keys, and providing a consistent way to enforce compliance across critical banking systems.

Building on that trusted security layer, Atruvia began exploring ways to bring the same level of consistency and control to infrastructure delivery. The answer came with IBM Terraform. What started as a small proof-of-concept for deploying cloud infrastructure quickly grew into a company-wide initiative to standardize provisioning, enable developer self-service, and embed compliance into every workflow.

"We wanted to have a single source of truth and a descriptive view of everything we run everywhere," said Pelke. "And that's what led us to Terraform."

Terraform became the backbone of Atruvia's new platform-as-a-product model. By defining infrastructure as code (IaC), teams could finally replace manual requests with standardized, reusable modules and GitOps workflows. To secure provisioning in a regulated financial environment, Terraform was integrated with Vault and GitLab pipelines, allowing secrets to be injected directly into CI/CD workflows with full audit trails and policy enforcement.

“That’s where we can really shine,” said Pelke. “Standardized environments that make life easier for app teams, where everything is interconnected and deployed via self-service.”

Cultural adoption was equally important. Atruvia didn’t mandate change, but it led by example.

“We showed and didn’t tell,” said Essig. “We created a GitOps onboarding pattern, and more teams adopted it because it worked.”

To further support this shift, Atruvia trained consultants to guide development teams through the process, from repository setup to deploying infrastructure “the Atruvia way.” Together, Vault and Terraform became the foundation of a secure, compliant, and scalable provisioning pipeline built for modern banking.

The shift to Terraform and Vault modernized Atruvia’s infrastructure and transformed how the organization delivers value. By automating provisioning, embedding compliance into pipelines, and enabling developer self-service, Atruvia turned IT from a bottleneck into a true business enabler. What once took months can now be done in minutes or hours, freeing teams to move faster, safer, and with greater confidence.

Pelke recalled a major turning point after adopting Terraform, when the network team was tasked with adapting a complex network configuration for a second cloud native segment in one of their data centers. The setup had evolved through years of experimentation, making it notoriously difficult and time-consuming to reproduce.

“We built an entire cloud native network segment exactly configured like the first in 15 minutes, or an hour if we include troubleshooting. Without Terraform, that would’ve taken weeks.”

Beyond time savings, Terraform and Vault have redefined how Atruvia’s teams work. System engineers who once relied on manual interventions now operate like software developers: writing code, versioning changes, and deploying through standardized pipelines.

“For our systems engineers, the workflow has changed drastically,” said Pelke. “Today, making a change means updating code, staging it, and deploying — not logging in on a Saturday night to fix things by hand. With Terraform, we’ve completely transformed how our system administrators work.”

Compliance, once a manual audit process, is now built into workflows, supported by automated scanning and centralized secret management. These changes also improved visibility and confidence across the organization. Security teams can now trace every infrastructure change, while developers enjoy faster feedback loops and fewer bottlenecks.

Provisioning in minutes, not months

Outcomes



Cluster provisioning time: 3 months → 4 hours



Network configuration: weeks → 15 minutes



Regional hubs: deployed in hours instead of weeks



Standardized pipelines: across datacenters and clouds



Cross-team collaboration: through shared IaC workflows



Infrastructure as code: enabled by standardized IaC platform

Investing in the future

As the digital demands on banking continue to evolve, Atruvia is staying ahead by doubling down on automation, compliance, and secure delivery across its ecosystem. The transformation set in motion by Terraform and Vault is now scaling across teams, workflows, and platforms.

Next on the roadmap:

- Deeper GitLab-Vault integration with dynamic authentication
- Policy as code for end-to-end compliance automation
- Standardized internal APIs for productized infrastructure delivery

“What we’ve learned from running Vault and Terraform is that identity and access management is a domain in itself,” Pelke explained. “That’s where we’re heading next — pushing secrets to each team’s own Vault namespace.”

The team also plans to fully move from Bitbucket to GitLab to centralize their pipelines, streamline compliance, and improve how Vault and Terraform work together across the platform. These initiatives reinforce a broader shift: Infrastructure that’s not just automated but secure by default and built for agility.

With HashiCorp as a strategic partner, Atruvia is well-positioned to support the evolving demands of Germany’s cooperative banks, delivering the reliability of traditional finance with the velocity of modern software.

Atruvia Partners



Martin Pelke
Product Owner
Atruvia

Martin Pelke is an experienced and ambitious product owner who has a keen sense of how complex architectures can be communicated in a simple way. His technical background, combined with scientific working methods, are groundbreaking for Atruvia's Infrastructure as Code Journey.

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Martin Pelke
Product Owner, Atruvia



Lukas Essig
Senior Cloud
Platform Engineer

Lukas Essig is a highly skilled infrastructure engineer with a unique technical background. He has a passion for diving deep into any technology he encounters, whether it's IBM's Z-Series or the public cloud. His technical expertise and curiosity make him Atruvia's leading platform engineer, driving the development of their Infrastructure as Code platform.

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Martin Pelke
Product Owner, Atruvia

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