

RESOURCE CENTER

Titanom Technologies protects developer secrets with Bitwarden Secrets Manager

Educational software company Titanom Technologies bolstered developer security and increased productivity by deploying Bitwarden Secrets Manager.

Get the full interactive view at
<https://bitwarden.com/resources/titanom-technologies-bitwarden-secrets-manager/>



Titanom Technologies

- Founded: 2020
- Industry: IT Services and IT Consulting
- Employees: ~ 50
- Credentials to manage: 100+
- Location: Germering, Germany

Titanom Technologies specializes in developing traditional and AI-powered software for the education sector. Headquartered in Germering, Germany, Titanom Technologies closely partners with established companies, including a major publisher of educational literature in Germany, to deploy dynamic software ecosystems that transform classrooms.

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Situation

As a software company, Titanom Technologies needed to securely store, manage, and deploy developer secrets in order to safely create its products. 'Secrets' refer to digital authentication credentials for sensitive parts of the IT and developer ecosystem — including SSL/TLS certificates, API keys, database passwords, and private encryption keys. Initially, Titanom managed its hundreds of secrets locally, through .env files.

While a common practice among developers, defaulting to .env files can create an unwieldy and decentralized secrets environment within an organization. Storing secrets as plaintext environment variables in .env files makes it difficult for development teams to manage secret access and keep them up-to-date across the organization.

"At the very start, we were using .env files locally and I had no control over the secrets. We had a lot of outdated secrets on developer machines, and no way of knowing where they were," said Jannis Morgenstern, head of IT.

When their business adopted Bitwarden Password Manager for securely storing and sharing passwords and other sensitive information, Titanom Technologies began storing their developer secrets within that solution as well. "We started using the Bitwarden Password Manager, mainly for logins and credit cards, and were storing secrets in the secure note section," said Morgenstern.

While Bitwarden Password Manager helped Titanom Technologies secure their passwords, the team required a solution tailored for developer secrets. "We experienced an overhead time drain of communicating when team members would trade secrets and came to realize there was a better way."

Solution: Bitwarden Secrets Manager

Titanom Technologies knew it needed to level up its secrets management. When considering options, the company put a premium on a solution that was easy to use, intuitive, and highly secure. Having already experienced the benefits that came from the Bitwarden Password Manager, Titanom Technologies opted to deploy Bitwarden Secrets Manager.

The Bitwarden Secrets Manager is an open source and end-to-end encrypted secrets management solution for development, DevOps, and IT teams. With the Bitwarden Secrets Manager, companies can centrally manage unlimited secrets across the development lifecycle. The solution enables teams to safely share, retrieve, and deploy secrets, mitigating the need for sharing secrets in plain text or through .env files. Other benefits include the ability to define granular access permissions and develop custom applications that support your needs.

"I also tried out other secrets manager solutions, but Bitwarden Secrets Manager delivered the core features necessary for ensuring the security of infrastructure secrets at scale," said Morgenstern.

Simple secrets management "that just works"

To onboard the developer team to Bitwarden Secrets Manager, Morgenstern leveraged existing [help documentation](#) and created his own 'how to' guide. Morgenstern recounts that the team was incredibly receptive to the new solutions and appreciated the straightforward functionality.

"The team liked that everything just worked," said Morgenstern. "They didn't have to manually do anything beyond setting up one access token. The developer experience has greatly improved since then."

SDK that empowers IT leadership and developer productivity

Titanom Technologies opted to further bolster its experience with Bitwarden Secrets Manager through the development of a custom CLI, facilitated by the Bitwarden Secrets Manager software development kit (SDK) for Rust.

"I developed a CLI that reads a project configuration file, requests all the secrets from Secrets Manager and then injects them into a process. This way, you don't have to specify them manually in a configuration file."

Morgenstern believes this custom CLI, powered by the Bitwarden Secrets Manager Rust SDK, has decreased leadership workload and developer productivity. "I can definitely tell you that my workload has decreased, probably by one to three hours per week. Productivity has also increased, in part because of the tool I developed."

Comprehensive security coverage

While Titanom Technologies has never leaked secrets to outside parties, its pre-Secrets-Manager approach led it to accidentally commit secrets to GitHub. Since deploying Bitwarden Secrets Manager, they have benefited from the added developer security the tool offers, along with the well-rounded security coverage already offered by the Bitwarden Password Manager.

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head of IT

Said Morgenstern, "At this point, it would be almost impossible to leak our secrets. It's

just one less thing we have to worry about.”

Meeting global security standards

In the future, Titanom Technologies plans to move the whole organization to Bitwarden Secrets Manager and upgrade to the enterprise plan as they seek to achieve [ISO 27001 certification](#) — an international standard for governing information security, cybersecurity, and privacy protection.

Once upgraded to the enterprise plan, Titanom will utilize [enterprise policies](#) to enforce security rules for all users, like setting password strength, which will help the business meet ISO standards.

“I want to set guidelines on the password generator about how strong the password must be. That's very important right now for us to achieve the ISO 27001 certification,” said Morgenstern.

Both Bitwarden Secrets Manager and Bitwarden Password Manager enable Titanom Technologies to demonstrate cybersecurity resilience and be considered for this commendable certification.

Get started with Bitwarden

Learn more about what Bitwarden Secrets Manager can do for your business and [contact sales](#) for a free 7-day trial!