

The logo consists of a solid purple square. Inside the square, the word "zühlke" is written in a white, lowercase, sans-serif font. Below it, the tagline "empowering ideas" is written in a smaller, white, lowercase, sans-serif font.

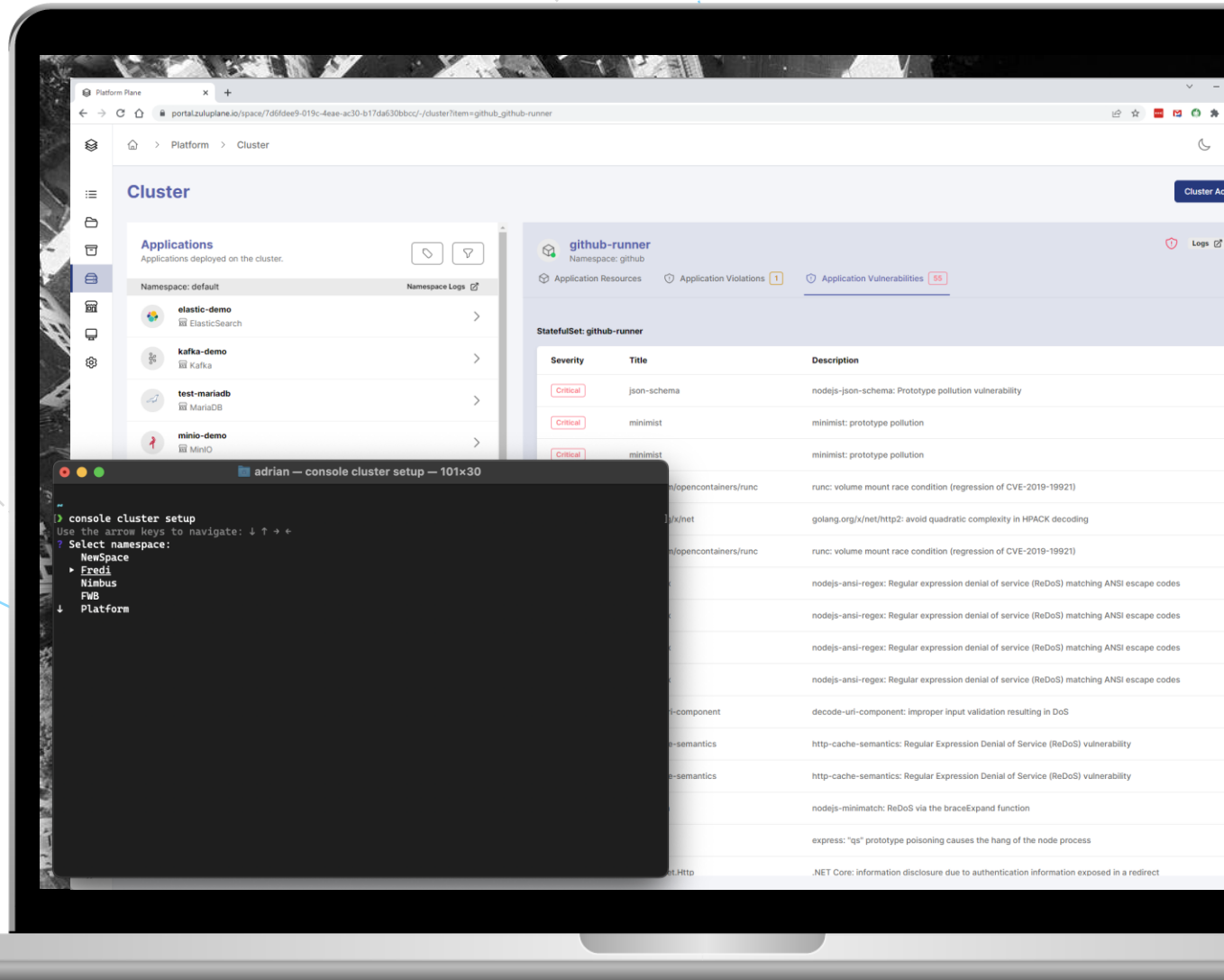
zühlke  
empowering ideas

# Platform Plane

Deliver High Quality Software requires the right platform

# Platform Plane

The Platform Plane is an **Accelerator Asset** built by Zühlke. It is built upon **best-of-breed** tools, **links** them together, **integrates** existing platforms/cloud solutions, and provides an **outstanding user experience** that simplifies development processes. With this modern approach you gain **more value for money**, a **faster time to market**, better **quality** and **top qualified professionals**. So that you can continuously deliver value for your customers.. The platform plane is **not an off-the-shelf product**, it is a **custom-made platform** for your needs.



# Why the Platform Plane?

Industrialize your software development

Platform Plane simplifies your development process, boosts productivity, and helps you deliver better software faster – across all your teams.



**Streamlined Development** - Platform Plane brings all your development tools into one place. You no longer need to switch between different applications and tools, which saves you time and helps you stay organized.



**Increased Productivity** - Platform Plane automates repetitive tasks, allowing your team to focus on what really matters - writing high-quality code. This leads to increased productivity and faster time-to-market



**Better Collaboration** - Platform Plane provides your team with a central hub for collaboration. You can share code, track issues, and communicate in real-time, which leads to better teamwork and improved efficiency.



**Enhanced Quality** - Platform Plane includes automated testing and code review tools that help you catch bugs and errors early in the development cycle. This leads to higher-quality software and fewer bugs in production.



**Scaled DevOps** - Platform Plane is designed to grow with your team. Whether you have a small startup or a large enterprise, Platform Plane can handle your development needs.

# Why Zühlke?

Zühlke is the ideal partner for the community of investors



We have a strong **partner network** that ensures we can provide comprehensive solutions to all our customers.

We have **extensive knowledge** in the banking **industry** and other industries, allowing us to deliver industry-specific solutions.

Zühlke is a **trusted company** that you can rely on to provide the highest quality services and solutions.

We are **investing significantly** in our Platform Plane to ensure it continues to evolve and meet our customers' needs.

We have a vast library of **reusable assets** that allows us to deliver the platform plane faster and more efficiently.

We are committed to **continuously improving** our services and solutions to deliver the **highest value** to our customers.

# What is our approach?

Optional subtitle of the slide



**Platform:** The Platform Plane to built upon **best-of-breed** tools, **links** them together, **integrates** existing platforms/cloud solutions, and provides an **outstanding user experience** that simplifies development processes, increases productivity, and delivers continuous value. The platform plane is **not an off-the-shelf product**, it is a **custom-made platform** for your needs.



**Individual Journey:** But what really sets us apart is our **customer-centric approach**. We understand that every customer is **unique**, with their own set of **needs** and **requirements**. That's why we **work closely** with each customer so that they can shape and help to develop the Platform Plane on their **individual journey**. We **listen** to your needs and requirements, and we work together in **sprints** to develop a solution that meets those needs.



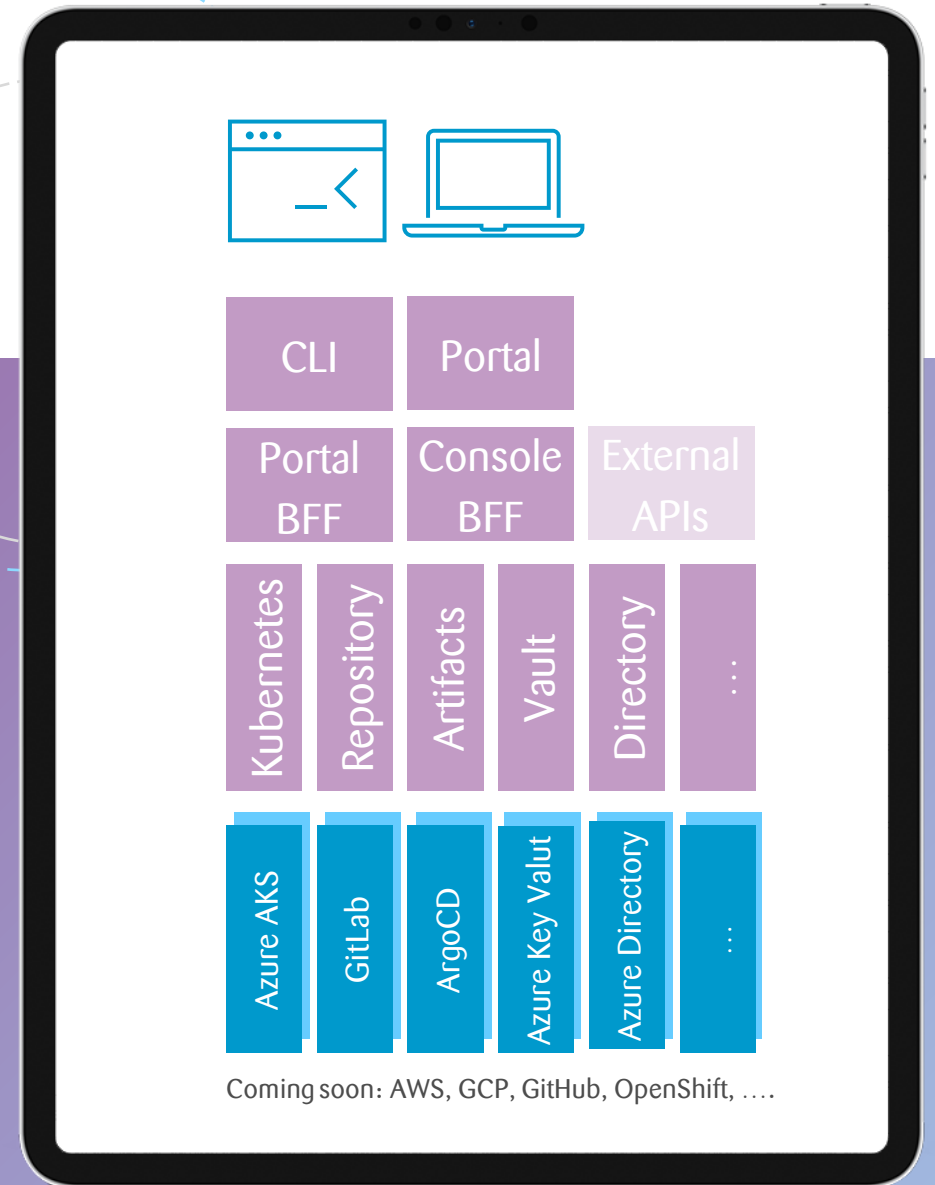
**DevSecOps:** For us, it is natural that **we also operate the products we develop**, so you can focus on developing your products while we take care of the underlying platform. Of course, we also **offer** the possibility of **shared operation**. And if you need additional support, we offer **consulting services** to help you optimize your development process and get the most out of the Platform Plane.

# The platform plane in one picture

The integrated tools don't know each other.  
They are integrated over the platform.



The architecture of the platform plane offers a **flexible**, **scalable**, and **secure** solution for modern software development that can adapt to the changing needs of businesses and industries. With the Platform Plane's **microservice** approach, integrating tools is seamless and efficient and enables easy and **rapid integration** of new tools, without the need for time-consuming and complex integrations between each tool.



# The platform plane is different

The Platform Plane is different from other development platforms in that it offers a comprehensive and fully customized Platform for your company with a portal that provides an outstanding developer experience and integrates all the tools needed to help agile teams to plan, develop, test, deploy, release, and maintain a product.

	Platform Plane	Azure / AWS / GCP	Backstage	GitLab	GitHub	OpenShift
Approach	The Platform Plane is built upon best-of-breed tools, links them together, integrate existing platforms/cloud solutions with a community-driven approach and collective investment.	Cloud-based platform for deploying, managing, and scaling applications.	A self-service developer portal for managing internal development tools.	A single application for the entire DevOps lifecycle, including version control, CI/CD, and project management.	A web-based Git repository hosting service for version control and collaborative development.	A container application platform for deploying and managing applications.
Integration	Integration of existing tools, platforms and cloud solutions for flexible development processes.	Integrated with other Azure services for end-to-end development and deployment.	Integration with various DevOps tools and services for comprehensive management.	Integrations with other tools for end-to-end DevOps workflows.	Integrations with other tools for collaborative development and project management.	Integrations with various cloud providers and development tools for deploying and managing applications.
User Experience	Outstanding user experience that simplifies development processes and increases productivity.	User-friendly interface and seamless integration with other Azure services.	User-friendly and customizable portal for managing internal development tools.	User-friendly interface and seamless integration with other GitLab services.	User-friendly interface and seamless integration with other GitHub services.	User-friendly interface and comprehensive management features for container applications.
Pricing	Managed capacity pricing model.	Pay-as-you-go pricing model with various pricing tiers.	Open-source and free to use.	Free and paid versions with various pricing tiers.	Free and paid versions with various pricing tiers.	Pay-as-you-go pricing model with various pricing tiers.



# Your Options

To deliver High Quality Software requires the right platform. These are your options:

Criteria / Option	Develop your own IDP	Buy a Platform	Platform Plane
	<p>If you have the resources and expertise to build your own IDP from scratch, this may be a viable option for you. However, developing an IDP can be a costly and time-consuming process, and may require a significant investment in infrastructure and personnel.</p>	<p>If you're looking for a pre-built IDP that can be customized to your needs, licensing a platform may be the right choice for you. However, many platforms have rigid pricing and customization options that may not meet your exact needs, and may not be able to keep up with the rapidly evolving technology landscape.</p>	<p>By becoming a member of the Platform Plane community of investors, you gain access to a powerful and flexible platform that will be tailored to your specific needs. You also benefit from the ongoing development and improvements to the Platform Plane that are funded by our community of investors, ensuring that you always have access to the latest tools and technologies.</p>
Development Time	High	Low	Low
Customization Potential	High	Limited	High
Upfront Cost	High	Medium	Low
Ongoing Cost	High	Medium	Medium
Maintenance Cost	High	Medium	Low
Scalability Potential	Low	Medium	High
Integration with Existing Tools	Dependent on Development	Dependent on Platform	High
Operational Support	Limited	Limited	High
Continuous Improvement	Dependent on Development	Dependent on Platform	High
Community Collaboration	Dependent on Development	Dependent on Platform	High

# The technology stack of the platform plane



Portal: React



Backend: Golang Microservices  
CLI: Golang (Windows, MacOS, Linux)



Kubernetes  
+ Custom Operators & Controllers



GraphQL



gRPC



CloudEvents (Async Events)



Grafana



Prometheus



Loki – Log Aggregation



Tempo – Distributed Tracing



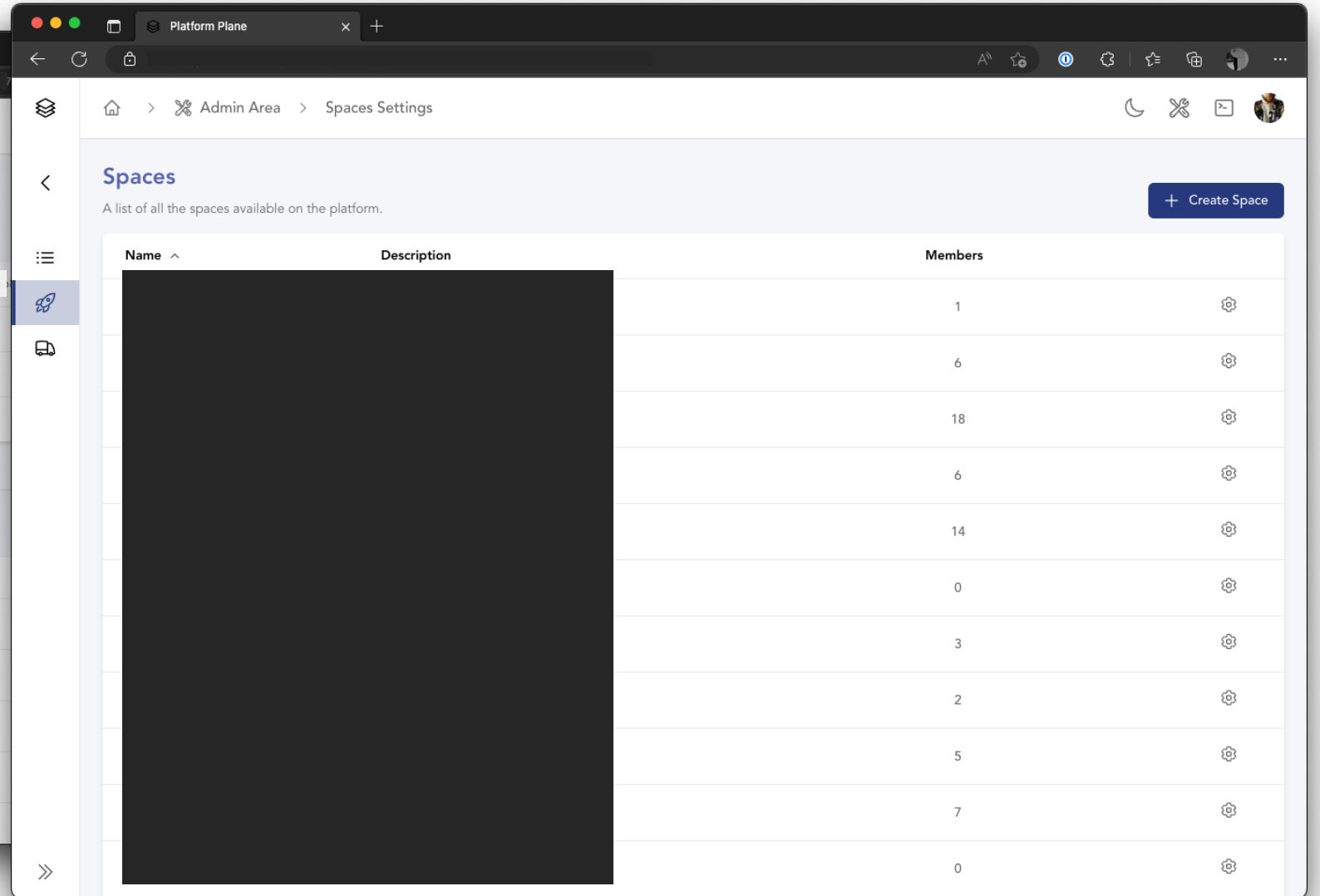
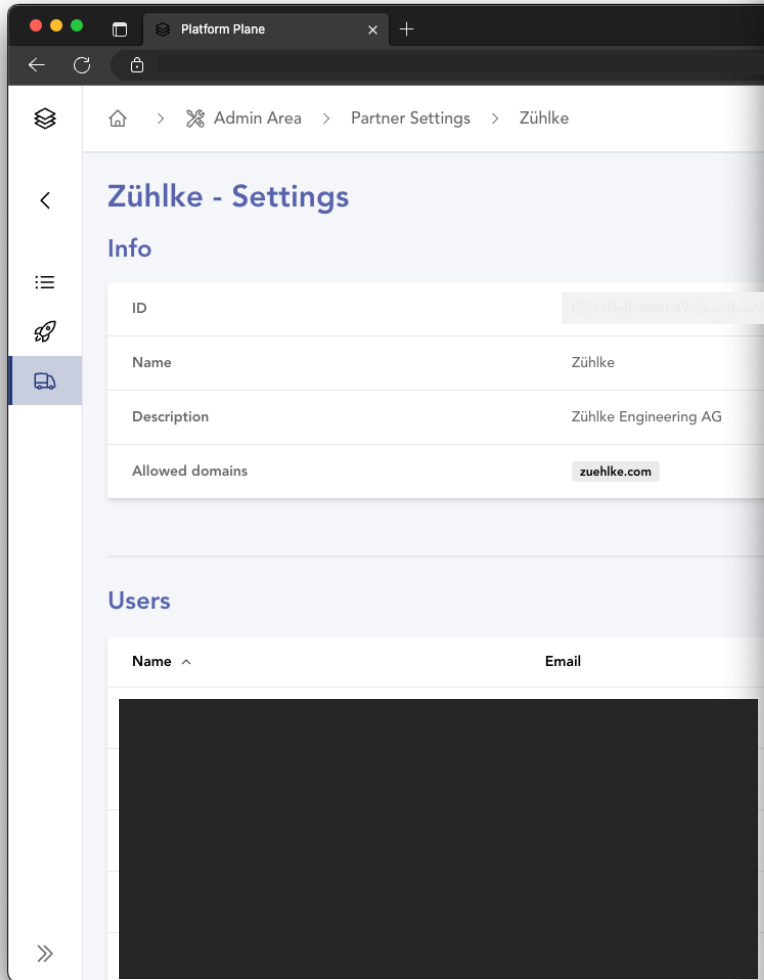
Trivy



Kyverno

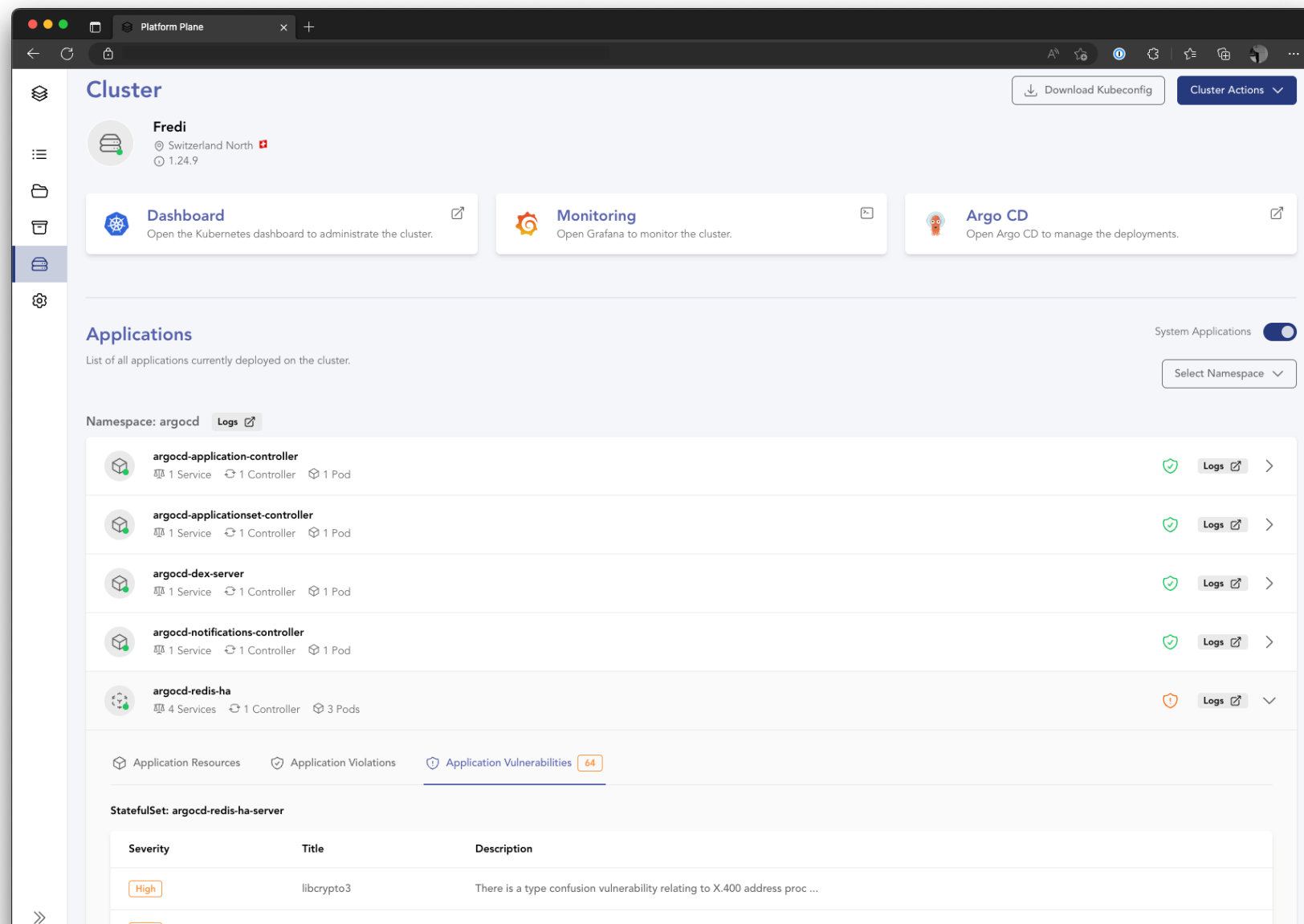
# Speed up Onboarding by Self-Service

For Partners/Vendors & Products



# Built-in DevSecOps to scale Security and Best Practices

## Container Security & Policy Engines

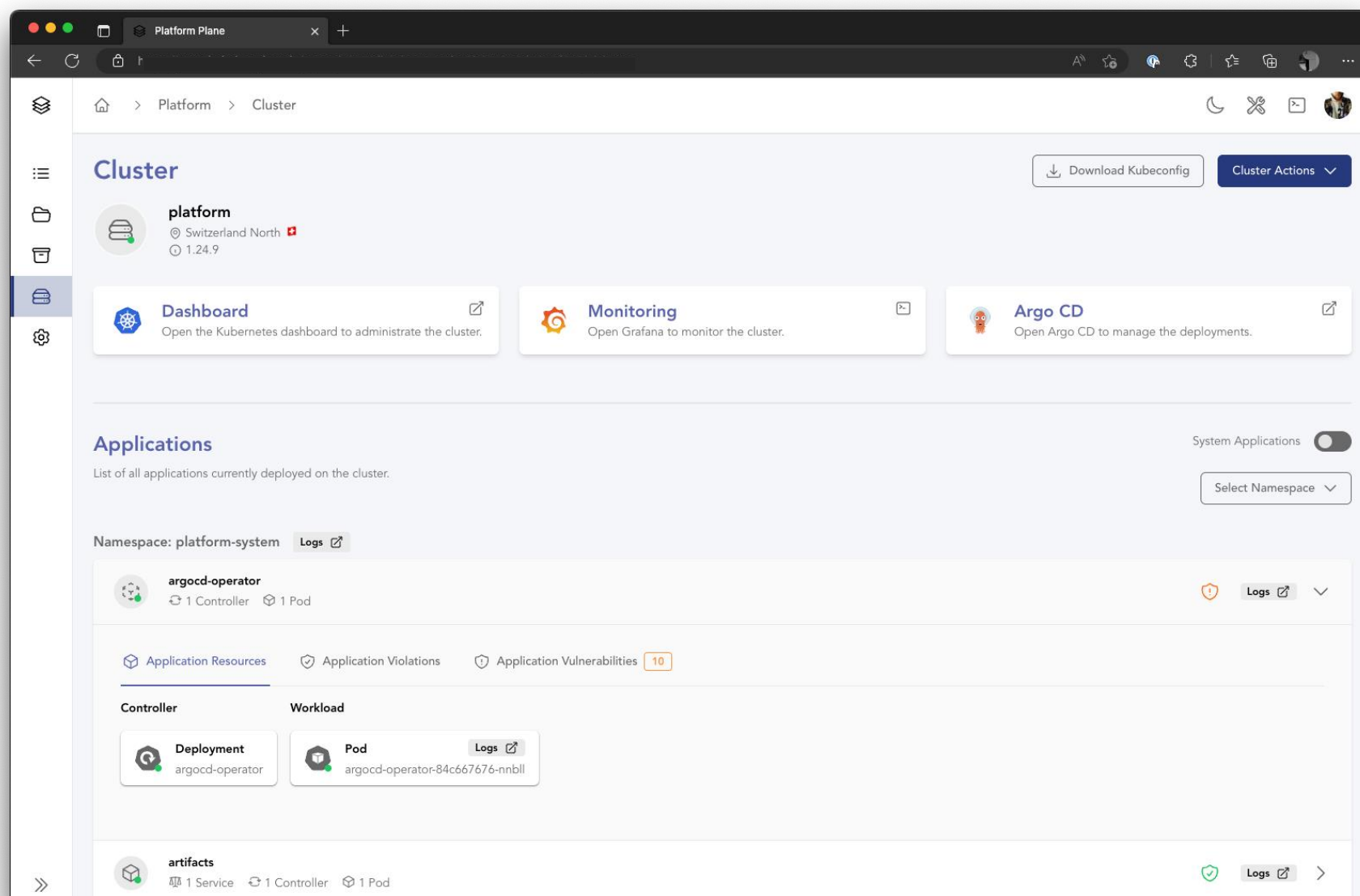


Kubernetes as a Service with managed Services like Databases, Event Brokers, Storage and trusted Network Access

Built-in Runtime Security Engines to ensure Compliance and communicate best-practices

Command Line Tools, ready-to-use Documentation & Examples for faster onboarding and a great Developer Experience.

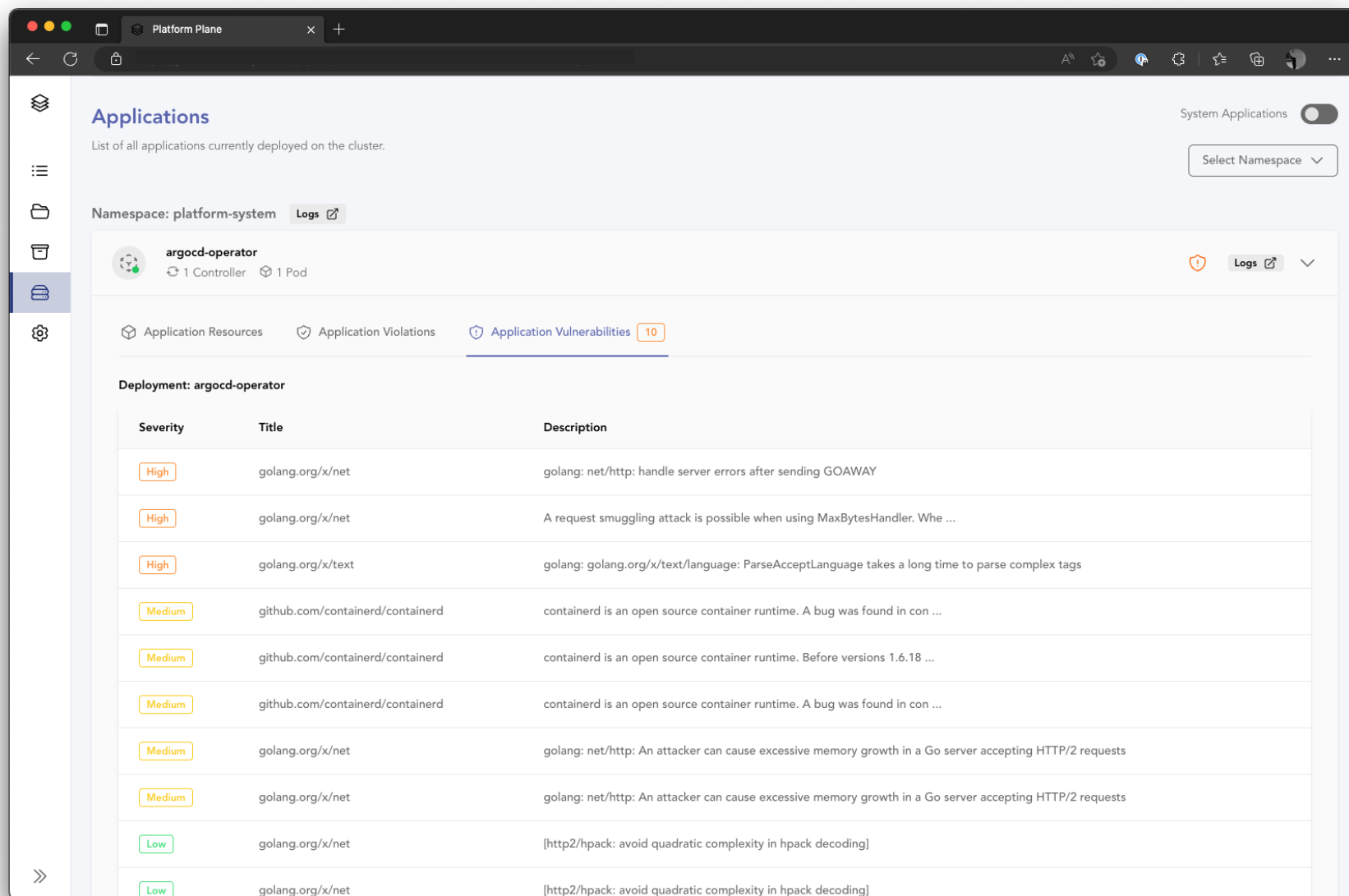
# Kubernetes as a Service



Unified and Opinionated  
Visualization of Applications by  
grouping abstract Kubernetes  
objects into understandable  
components for humans

- Direct Links to Logs  
(in Grafana / Loki)
- Built-in Observability Stack  
(in Grafana / Prometheus, Tempo)
- Pre-Installed Dashboards  
(for Network, Infrastructure, ...)

# DevSecOps: Runtime Container Vulnerabilities



Workload Images are continuously scanned for vulnerabilities in the backend and presented in the portal.

This should not be considered as a replacement for proper SAST and components scans in each pipeline by the development team– but bringing an automatized minimal report for validation.

## Outlook

We will extend this for stored images in the registry too.

# DevSecOps: Runtime Configuration Violations

The screenshot displays a Kubernetes dashboard interface for the 'calico-system' namespace. It shows several application resources, including 'calico-kube-controllers', 'calico-node', 'calico-typha', and 'calico-windows-upgrade'. A section titled 'Application Violations' is highlighted, showing three violations for the 'calico-node' DaemonSet. The violations are categorized as 'Medium' severity and are related to Pod Security Standards (Baseline). The violations are:

Severity	Title	Description
Medium	Pod Security Standards (Baseline)	validation error: Sharing the host namespaces is disallowed. The fields spec.hostNetwork, spec.hostIPC, and spec.hostPID must be unset or set to 'false'. rule autogen-host-namespaces failed at path /spec/template/spec/hostNetwork/
Medium	Pod Security Standards (Baseline)	validation error: HostPath volumes are forbidden. The field spec.volumes[*].hostPath must be unset. rule autogen-host-path failed at path /spec/template/spec/volumes/0/hostPath/
Medium	Pod Security Standards (Baseline)	validation error: Privileged mode is disallowed. The fields spec.containers[*].securityContext.privileged and spec.initContainers[*].securityContext.privileged must be unset or set to 'false'. rule autogen-privileged-containers failed at path /spec/template/spec/initContainers/0/securityContext/privileged/

There is a preinstalled Policy Engine (kyverno) installed on each Space's Cluster to audit configuration violations.

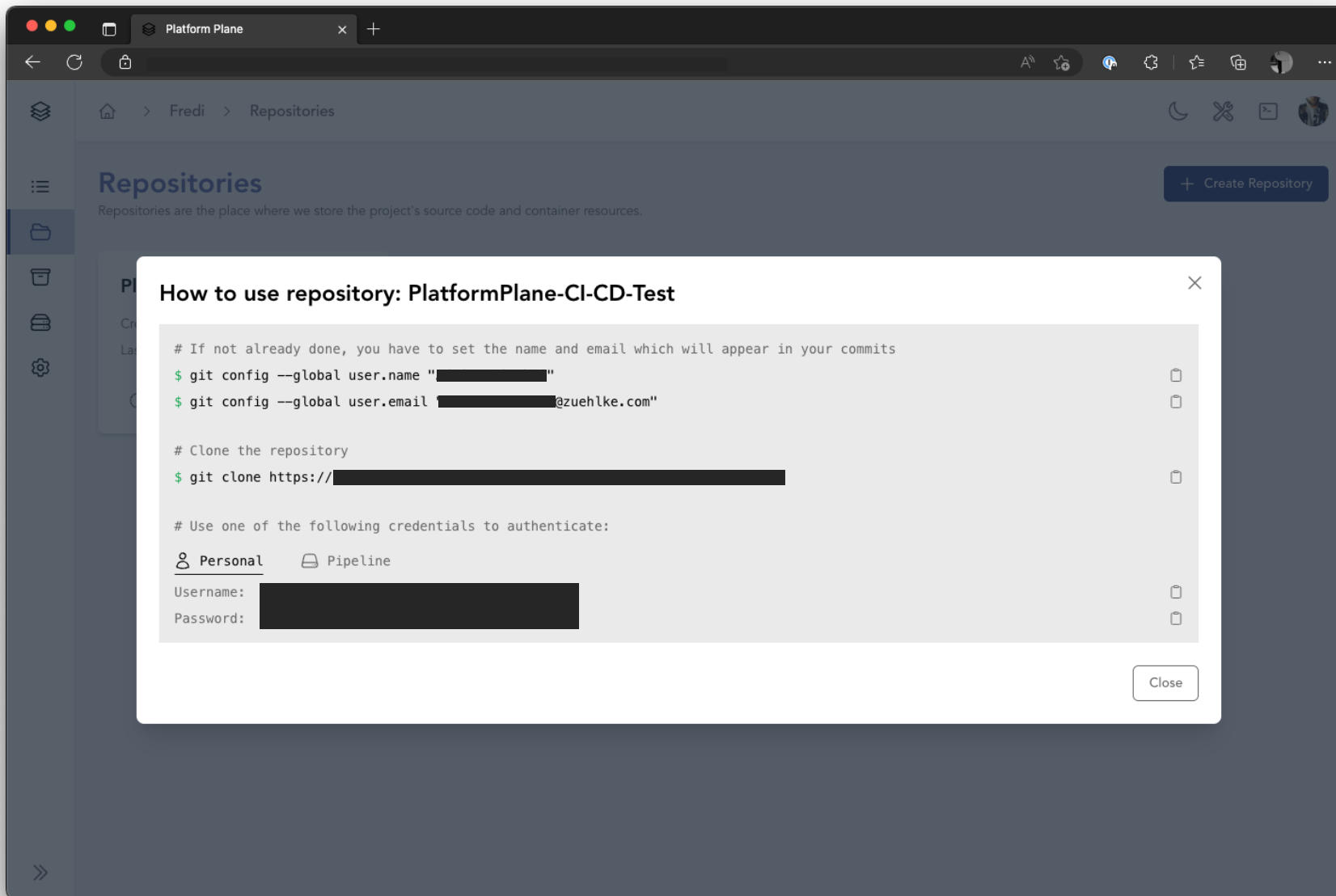
On the Development Stage, we do not block – but inform developers to allow a learning curve by gamification.

And allow a broad audience to start discussing about security risks.

We provide a baseline set. The platform can be extended to enrich or replace it.

# Repository / Artifacts as a Service

Provide interactive documentation and credentials



Interactive documentation in the portal to accelerate onboarding of new developers – or ease switching spaces/projects.

Credentials are automatically created and displayed – for both personal and pipeline use. We store them in Azure Key Vault

The automation allows for deeper integration into system but is also the foundation for rotating and scanning for mislaid secrets