



+13
years
experience

+100
million users
visit the applications
and services managed
by us every month

+300
successful
projects

Kubernetes - review

Within the consulting service, we provide assistance in designing Kubernetes cluster based solutions as well as additional related services:

- project analysis and support
- environment analysis
- recommendations regarding the platform configuration
- implementation of the client's software in the Kubernetes environment

The activities described above are carried out by our DevOps specialists in close cooperation with the client's developers to ensure knowledge transfer within the team and sharing best practices in the utilization and configuration of Kubernetes resources.

The outcome of the analysis is a documentation containing change recommendations, guidelines for modifying the infrastructure and installing additional elements tailored to the client's expectations and business requirements.



Kubernetes cluster overview

- Location (on-premise, cloud computing)
- Number of environments, setup (dev / test / stage) and resource sharing
- Use of AKS
- Implementation of automation tools in cluster creation process



The current state of the Kubernetes cluster

- Cluster configuration (e.g. YAML files)
- Cluster administration (e.g. using Helm tools)
- Use of specific functions (e.g. ingress controller, service mesh, operators)
- Other resources installed on the cluster



Security requirements and currently implemented solutions

- Rights control and management (RBAC / cloud-native)
- Credential management mechanisms (k8s secrets / vault / other cloud-native solution)
- Compliance with CIS Best Practices
- Access control and management system implementation (RBAC / cloud-native)
- Credentials management mechanisms implemented (k8s secrets / vault / any cloud-native tool)
- Compliance with CIS Best Practices



Estimated / planned costs of the cluster and their characteristics

- Use of autoscaling
- Fixed costs



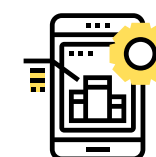
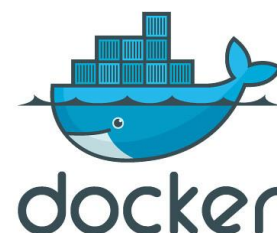
Monitoring / alerting methods and tools

- Currently used / implemented
- Planned for implementation
- Recommended by Hostersi



Readiness of the client application to use Kubernetes / Docker

- Configuration using environment variables or other
- Defined and implemented readiness / liveness checks
- Resource requirements and analysis (no. of requests / limits / CPU / RAM)
- Implementation of init containers (e.g. database migrations)



CI / CD process

- Definition and documentation of the CI / CD process
- CI / CD tools in use
- Current problems related to the CI / CD process



Configuration related problems

- Visibility of metrics
- Network performance
- Alerts