

KUBERNETES ACCELERATOR

Rapid set-up and implementation of a well-architected environment



Accelerate your Kubernetes deployment, while remain empowered and become the master of your Kubernetes stack.

The strength of Kubernetes lies in its ability to blend the simplicity of Platform as a Service with the stability of Infrastructure as a Service software. This provides developers a flexible open-source tool to build personalized Kubernetes workflows. But there is a catch to ultimate flexibility!

As the Kubernetes open-source community expands, many DevOps teams need to create more streamlined and automated processes which tackle new deployment challenges.

CloudNation developed the Kubernetes Accelerator Service.

MORE SECURE

- The Azure Load Balancer is the default public endpoint of K8S. We configure the Azure Web Application Firewall as protection layer between your cluster and the internet.
- We will help you keep the nodes up to date within the cluster while balancing your applications smoothly during the patch process.
- Role-Based Access is by default admin access! We will configure the cluster for the least-privilege access.

MORE SCALABLE

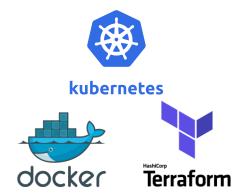
- We will configure your cluster to scale as expected. Kubernetes is made for scaling, but workloads do not scale-out automatically accordance to the actual load...
- Pods are not re-balanced when you up and down scale the cluster. We will ensure that pods will rebalance to ensure optimal costs and performance.
- We will help you with a strategy for autoscaling to find the sweetspot for costs and availability.

MORE RESILIENCY

- We help you to select the right size of the nodes required for the workload. And eventually decide how to save costs on the long-term.
- By default, resource limits are not configurated. We will work together to tailor the limits to your needs.
- We'll make sure the cluster is deployed with Microsoft best practices and extra's. To ensure compatibility with new future's and updates from Microsoft.

What is included in Kubernetes Accelerator

- High level design of the to build Kubernetes environment based on the Azure Kubernetes Services
- Fully automated deployment of the Azure Kubernetes service based on our CI/CD pipeline
- Exit strategy: You have no lock-in to our infrastructure as code deployment framework, you're services will still be running and manageable.
- Optionally you can keep up-to-date with the updates & upgrades of the kubernetes services by onboarding to our managed cloud services.



"With the Kubernetes Managed Service from CloudNation we were able to cut the management costs while relying for the cluster operations to the real Experts."



KUBERNETES ACCELERATOR

Outlining our 5-day Kubernetes implementation



Start with a solid foundation to accelerate running workloads in days.

We have built a generic pipeline for the provisioning and configuration of the Azure Kubernetes service. It is a configurable CI/CD pipeline which can be tailored to your situation. The pipeline deploys all the required resources using an infrastructure as code pipeline, which guarantees that every provisioned environment is working as desired and matches the Microsoft Best practices.

The cluster will be configured with the required management tools to keep the cluster healthy and secure.

Optionally after creating the Kubernetes cluster, we ensure that the cluster is up-to-date and runs within the Microsoft supported range of K8S versions.

Day 1 **Kubernetes** workshop



Setting the stage and discuss the configuration of the to be Azure Kubernetes services with regard to Sizing, inbound connection, container registry, networking and container storage.

High Level Design



Setup of a visualization representation of the to be environment in Azure. Based on MS best-practices tailored to your organization.

Day 3 Build



Start of the configuration of the Azure Kubernetes Service using our automated deployment pipelines. The configuration will be tailored to your specifications and requirements.

Day 4 Iterate



Finetune the configuration matching specific needs of the organization and grant permissions for the specific roles.

Day 5 **Adoption** workshop



Now the cluster is ready to onboard your workloads we help you to get started.

Optional: Managed Kubernete **Updates & support**



To keep your Kubernetes platform up-to-date and secure we offer a managed kubernetes subscription model.

"With the Kubernetes accelerator we were able to safely start with Azure Kubernetes Services without huge upfront investments in the Kubernetes services."