

Self-Service App Development for this Manufacturing Company

Industry

Manufacturing

Location

Germany

Key Challenges

- High workload for the VI-admins
- Little scalability
- Operational issues – security problems

Solution

With VMware Cloud Foundation with Tanzu, the customer’s developers can now roll out our Kubernetes Clusters in a self-service fashion.

“Continuous innovation is the foundation for our company’s success” says the CIO proudly, “we have been innovating PVC extrusion for more than 50 years and are looking to a bright future with new sustainability concepts and digital innovation in the window and door market.” This sounds pretty generic, but our customer is indeed on forefront of innovation – even when it comes to innovating their IT infrastructure. We at comdivision are proud to have been their partner for virtualization and mobile device management for the last 15 years! Now we were able to support them in a new field of innovation: app development and modernization.

“I was visiting the customer on an unrelated project”, said Fabian Lenz, comdivision’s lead architect on the case, “we were working on migrating another datacenter to VMware Cloud Foundation, when the head of infrastructure received a phone call from the product development team” recalled Lenz. “Actually, I could tell he reacted quite exasperated that apparently, they called again to request to destroy the old and roll out a new Kubernetes Cluster for the team, as they were experimenting with this new development technology. ‘This is now the fifth time this week!’ he exclaimed” Lenz concluded.



The Challenge

As it turns out, a few app developers were thrilled with the new possibilities that Kubernetes had brought and started to “play around with it”. They were excited for good reason, the scalability, management and most importantly

Business Benefits

- Better scalability of app development
- Reduction of workload for IT
- Faster innovation

VMware Footprint

- VMware Cloud Foundation with Tanzu

the opportunity to develop cloud native apps had drawn them to Kubernetes. However, what nobody had really thought of until then were the challenges that came along. The new pace of development brought to light, that they needed a better grasp on managing the app development, not just from an infrastructure point of view, but also for security reasons and scaling of the infrastructure to the rest of the team and not just the early adopters.

“I can’t be rolling out new test clusters every other day” said the infrastructure lead “also, I’m the only one that knows how to configure a Kubernetes cluster in our team and I am not that scalable” he laughed.

The Solution

“VMware Cloud Foundation with Tanzu can be used to create Kubernetes clusters out of the box in a self-service fashion” said Lenz “we can set up a Kubernetes supervisor cluster that can be used to create new on-demand kubernetes clusters for developers”, he continued and explained: “internal IT is just responsible for running the infrastructure; all other tasks can be done by the developers in the on-prem environment. Kubernetes Pods are shown in the vCenter Server UI as a workload”.

Containers and Kubernetes are managed alongside VMs from a vCenter perspective. VI admins who previously managed thousands of VMs can now manage just dozens of application namespaces, resulting in a massive increase in scale and reduction in cognitive load. “With the integrated lifecycle management that is done through the SDDC Manager, all underlying components are validated for interoperability” said Lenz “this way, the developers can do their thing building and deploying apps and the admins can focus on the global infrastructure.”

The Results

When a developer requires a quick test-cluster with five worker nodes, the VI admin can give the developer the permission to deploy the cluster through self-service.

Since NSX-T is already part of VCF, all network components are created automatically and proper security policies are applied.

“I heard about this Tanzu thing, but wasn’t sure what that means for us” said the head of IT infrastructure “I thought, that this is only for huge enterprises with thousands of developers, but the Fabian has laid it out for us in simple terms, we can now see how even a mid-size company benefits from it.”