Self-Service App Development for this Manufacturing Company

industry

Manufacturing

location

Germany

key challenges

- High workload for the VI administrators
- Limited scalability
- Operational & security issues

VMware products

- VMware Cloud Foundation with Tanzu

"Continuous innovation is the driving force behind our business success," emphasizes the CIO. "For over 50 years, we've been at the forefront of PVC extrusion, and with new sustainability concepts and digital innovations, we look forward to a bright future in the window and door market." And for over 15 years, we at comdivision have been proud partners in virtualization and device management. Recently, we joined them in another field of innovation: app development and modernization.

our lead architect on the case

Fabian Lenz

"On a customer visit we were working on the migration of a data center to VMware Cloud Foundation," said Fabian Lenz, lead architect at comdivision. At that moment, the head of IT infrastructure received a call from the development team. Lenz noticed that the infrastructure leader seemed visibly frustrated, having to set up a new Kubernetes cluster for the development team for the fifth time in just one week."

the challenge

It became evident that many app developers were excited about the possibilities Kubernetes offered and began experimenting with it. Their interest was sparked by scalability, management, and, in particular, the ability to develop cloud-native apps. However, until that point, nobody had truly considered the associated challenges.

The accelerated development pace highlighted the need for a deeper understanding of app management - not only in terms of infrastructure but also concerning security and scaling the entire infrastructure for the entire team, not just the pioneers.

The head of infrastructure expressed his concerns: "I can't keep setting up new test clusters constantly. Additionally, I'm the only one on our team who knows how to configure a Kubernetes cluster, and my skills aren't infinitely scalable," he added with a laugh.

solution

With VMware Cloud Foundation with Tanzu, the customer's developers can now roll out their Kubernetes clusters as a self-service.

„I had heard about this Tanzu thing, but I wasn't sure what it meant for us. I thought it was only for large companies with thousands of developers, but Fabian explained it to us in simple terms, and now we know that even a medium-sized company benefits significantly from it."

Head of IT Infrastructure

the solution

"Using VMware Cloud Foundation and Tanzu, Kubernetes clusters can be created in self-service mode instantly," emphasized Lenz. "By setting up a Kubernetes supervisor cluster, developers can create their own on-demand Kubernetes clusters. The primary responsibility of internal IT lies in managing the infrastructure, while other tasks can be handled by developers in the on-premises environment. Kubernetes pods are displayed as workloads in the vCenter Server interface."

Containers and Kubernetes are managed alongside virtual machines from the perspective of the vCenter administrator. Former VI administrators, who used to monitor numerous VMs, now primarily focus on application namespaces. This significantly enhances scalability and reduces mental strain. "The integrated lifecycle management through the SDDC manager ensures the interoperability testing of all base components," explained Lenz. "This allows developers to complete their tasks and deploy apps, while administrators can concentrate on the global infrastructure."

the result

Should a developer need a test cluster with five worker nodes quickly, the VI administrator can grant them permission for self-service creation. Since NSX-T is an integral part of VCF, the automatic creation of all network components takes place, with the appropriate security policies applied.

further details?

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