

Industry

Education

Location

Germany

Biggest Challenge

- Secure VDI infrastructure across faculties and campuses
- Scalability

Solution

A VMware Horizon Pod Architecture that fulfills the needs of all identified use cases for unified student pools, organizational workers, and special purpose desktops, with a high demand for application changes within the environment.

VDI Pod Architecture to scale

Close to 15.000 students are spread across 4 cities and 10 faculties. 1.000 employees and 200 professors from 20 departments have different needs for their Desktops, but most importantly, the university needed ways to scale quickly for each class. Managing the infrastructure, rolling out and handling new desktops quickly became a big task.

But the biggest challenge was not just the scale-up, but also the tear-down after use, explained the head of IT: "When a new course starts – for example in computer sciences – each student needs a separate, but unified desktop for the context of the course" he explains, and continues "the professor needs to prepare a Desktop with secure access to specific apps and data. This was a timeconsuming task, let alone not very secure. We also constantly worry about resources, to quickly eliminate the desktops that are no longer in use" he concludes.

our lead architect on the case*Fabian Lenz***The Challenge**

Fabian Lenz, comdivisions lead architect for this customer, has done a lot of implementations for customers that scale out and up with thousands of Desktops, so he knows about the challenges: "we cannot stress this enough, security is a big deal, especially with remote users, that all need access to on-premises resources".

Fabian and his team needed to perform a proper assessment, as it is customary for all of comdivisions projects.

The Solution

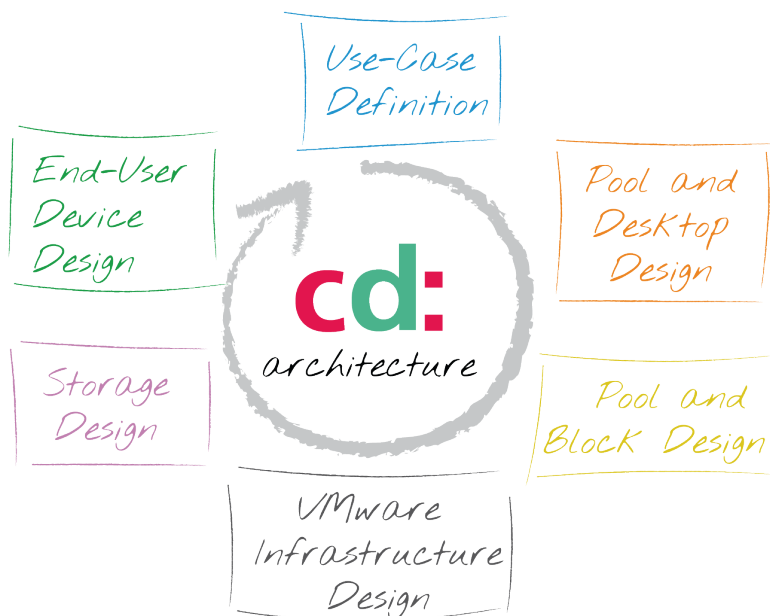
So armed with the information gathered from the different departments, the team prepared to deploy an Horizon environment that gives students proper access to university-relevant desktops and applications from any location at any time.

With a pod architecture feature, administrators can tie multiple pods together to provide a single large desktop and application mediation and management environment.

A pod consists of a set of Connection Server instances, shared storage, a database server, and the vSphere and network infrastructures needed to host pools of desktops and applications. In a traditional Horizon implementation, each pod is managed independently. With the cloud pod architecture feature, multiple pods can be federated to form a single Horizon implementation known as a pod federation.

"We defined a Horizon Pod Architecture that fulfills the needs of all identified use cases for unified student pools, organizational workers, and special purpose desktops, with a high demand for application changes within the environment" Lenz explains and continues "the infrastructure even utilized NVIDIA Grid-based virtual machines on a vSphere/vSAN platform. A Horizon Pod Architecture has been created to scale from initial 500 - 20.000 users!"

The solution utilized VMware User Environment Manager & VMware App Volumes.



The Result

"The great feature about the Horizon pod architecture is the fact, that a pod federation can span our four campus sites," says the head of IT. "This simplifies the management effort required to manage a large Horizon deployment."

comdivision helped the customer to create three use cases that the customer can use as a template, a boiler plate to create the remaining use cases.

"With Fabians help, we now have amuch better understanding of what is required in terms of infrastructure demand. Also, we can now focus on our daily business, instead of worrying about coming up with an infrastructure

architecture task that we would have to do only once. As a university, we are the first to say, that some tasks are best left to the experts, that do this daily – like the comdivision team in this case.”

“As soon as we have finalized the task of setting up the remaining use cases, we like Fabian to come back and help us with the next task”:

The Outlook

The university will need help to extend the environment from the current use-cases to the ultimate end user workspace. Due to a lot of engineering applications that rely on Linux, Linux based VDIs will play a more and more important role.