The University of Paderborn Switches to Tintri Storage

Tintri Provides High Performance for Virtualised Applications and Services

www.uni-paderborn.de/en/universitaet

Industry
- Higher Education

Geography
- Paderborn, North Rhine-Westphalia, Germany

Virtualization environment
- VMware vSphere
- Traditional storage: HP LeftHand storage systems

VM profile
- MS SQL, Exchange, SharePoint, Active Directory, Apache, PHP, MySQL, OTRS, FlexNet, Icinga, MediaWiki, Exim, OpenLDAP
- Inadequate performance from existing HP LeftHand storage environment

Tintri solution
- Tintri VMstore™ T880 systems

Primary use case
- Tintri storage is being used for 500 virtual machines

Business benefits
- Simplified storage deployment and management for the virtual machines
- Gained the ability to see performance metrics at the VM-level

The University Paderborn

The University of Paderborn is located in North Rhine-Westphalia, Germany. Founded in 1972, it is now known as "the University for the Information Society". The University's strong foundation in computer science and its applications, as well as the importance of IT for a growing number of University disciplines, are the pillars for this claim. With 20,000 students and 216 professors, its compact campus provides a friendly, green, connected environment with excellent services for student life.

IT Challenges

Christopher Odenbach works in the IT infrastructure division at the University of Paderborn, with responsibility for managing all servers and storage, virtualisation, and Linux environments. "I work in the IMT department, which is the University's centre for IT and media technology," Odenbach explained. "We started using HP's LeftHand iSCSI block storage in 2008. It was a very simple approach to storage and easy to use. The LeftHand systems worked adequately for a while for most of our virtual machines, but we have a few applications that require very high performance. One of those is our University Library Search Engine. It has a huge database, just over 1TB. It took about four or five hours for a full database dump. If one storage node's cache battery failed the cache was automatically disabled, resulting in terrible backup times of more than 24 hours."

Running the POC on Tintri

Odenbach made the decision to try the Tintri systems in 2013. "Our director was quite interested in the Tintri value proposition," noted Odenbach. "So about two years ago, we ran our first proof of concept on the Tintri demo machine. We were absolutely amazed at how easy it was to implement the system and integrate it with our infrastructure. We were also impressed with how transparent it is. You can see every virtual machine with every virtual disk, including specific IOPS on the storage. This was something completely new to us. With the LeftHand systems, we could only see performance at the volume level, and each volume had 30 to 40 virtual machines. If one VM went crazy and started churning out thousands of IOPS, we couldn't see which VM was doing this. With Tintri, we can see exactly where we are having an issue and can fix it quickly."

" We were absolutely amazed at how simple it was to integrate, how fast it is compared to other systems, and the transparency of the system. Switching to Tintri was clearly a smart decision—for a University that wants to be known as a leader in the information society."

Christopher Odenbach, Server and System Administrator, The University of Paderborn

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Why Tintri?

The University of Paderborn purchased its first T880 system earlier this year. "The main reason we chose Tintri was for its high performance. With the LeftHand systems, there was no hybrid storage, just plain disks with no flash-based storage or SSDs. We also looked at Pure Storage's all-flash system, but it was too expensive, so the hybrid approach seemed right for us. We were looking for a simple storage platform that was specifically built for virtualisation, and that's just what Tintri is. It was the obvious choice for our needs."

Faster Performance

The Tintri systems are providing the high performance needed for all of the University's systems. "We were absolutely amazed at how simple it was to integrate, how fast it is compared to other systems, and how transparent the systems are. Switching to Tintri was clearly a smart decision for a University that wants to be known as a leader in the information society."

About Tintri

Tintri builds smart storage that sees, learns, and adapts, enabling IT organisations to focus on virtualised applications and business services instead of managing storage infrastructure. Tintri application-aware storage eliminates planning and complex troubleshooting by providing VM-level visibility, control, insight and agility. Tintri powers hundreds of thousands of virtual machines running business critical databases, enterprise apps, desktops and mobile apps, and private cloud deployments. Tintri helps global enterprises such as AMD, F5 Networks, GE, NEC, NTT, MillerCoors, and Time Warner maximise their virtualisation and cloud investments. For more information, visit www.tintri.com and follow us on Twitter: @Tintri.

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