ROFA Group Transforms its IT Into a Private Cloud with Nutanix

With a hyperconvergent infrastructure (HCI) from Nutanix, the global operating ROFA Group not only provides virtual applications, but also file services for distributed locations – securely, efficiently, and highly available.

EXECUTIVE SUMMARY

Due to digitalization and the growing number of company locations, the IT requirements of the ROFA Group have increased significantly. The company's IT organization therefore decided to migrate to the Nutanix Cloud Platform. This allows the group to achieve the scalability, security, and flexibility that is needed for the next stages of development.

> "Nutanix provides us with an all-inclusive carefree package for our IT with a fully integrated infrastructure, centralized management, and easy scalability. Thanks to the good support we received from IF-Tech, we rapidly realized the opportunities the platform would open up for us. Nutanix Files, for example, completely eliminates the need for separate file servers at branch offices."
>
> – Martin Holler, IT Administrator, ROFA Group

CHALLENGES

The ROFA Group, headquartered in Kolbermoor, Germany, provides turnkey solutions in the areas of conveyor systems, automation technology, intralogistics and special machine construction. The group of companies plans and realizes new constructions, modernizations and retrofits of existing plants for its customers from different industries. 1,400 employees at 14 locations implement around 250 challenging projects every year. With technologies such as electric monorail systems, fully automated

INDUSTRY
• Manufacturing

BENEFITS
• ROFA Group was able to reduce the complexity of its IT with Nutanix—applications and file services run on an integrated platform that flexibly scales as requirements grow.

• The high infrastructure availability secures the digital business processes and company data at every location.

• Integrated analysis and monitoring features help meet the safety requirements of automotive customers.

SOLUTION
Nutanix Cloud Platform
• Nutanix Acropolis
• Nutanix AHV
• Nutanix Prism
• Nutanix Files
• Nutanix Mine with Veeam

Applications
• DMS / PDM PRO.FILE
• Fortinet Security Solutions (EMS, FAZ, FAC)
• ERP Navision Business Central
• Various databases, CAD-.Backends and VMs for internal workflows.

order-picking systems and driverless transportation systems, the ROFA Group helps its customers make the production environment and internal logistics processes even more efficient.

The ROFA Group's internal IT organization also strives for maximum efficiency in the operation of its business applications and IT systems. "Many production-related processes are now highly digitalized," says Martin Holler, IT Administrator at ROFA Group. "Our employees need quick access to a wide range of data and applications at all times, from the development of new equipment to sales and customer service. At the same time, the requirements for information security and availability have increased significantly in recent years. Especially, customers from highly regulated industries such as the automotive industry expect end-to-end secured procedures for data processing."

To meet these requirements, the IT organization has systematically invested in new technologies in recent years. Among other things, a major part of the IT applications was virtualized with Microsoft Hyper-V and KVM. We also introduced the Fortinet Security Fabric, a modern security architecture to protect applications, networks, and endpoints reliably against growing cyber threats. "New investments were also on the agenda in the area of infrastructure," explains Martin Holler. "The existing SAN solution was approaching end-of-life, and server and storage systems were also increasingly reaching their capacity limits. We were therefore looking for a sustainable and easily scalable infrastructure solution to be ready for the years to come."

SOLUTION

The IT leaders first looked at different solution models based on traditional 3-tier architectures. "We already had some specific offers on our table when IF-Tech finally introduced us to the Nutanix Cloud Platform," reports Martin Holler. "We quickly realized that this was really going to bring our IT to the next level." Unlike traditional virtualization architectures, the Nutanix hyperconverged infrastructure (HCI) integrates all components into a turnkey solution. Servers, storage, storage network, and virtualization technology do not need to be procured, implemented, and managed separately. Instead, Nutanix clusters are up and running within hours and can be centrally managed and monitored via the Nutanix Prism management interface.

"Nutanix's technology offers us exactly the 'simplicity' we want for our IT," says IT administrator Patrick Kurz. "The management is highly automated and adjustments to the environment are possible even without special know-how. We can also flexibly scale up the performance according to our needs." Ultimately, the deciding factor in favor of Nutanix was that the platform also offers an easily scalable file storage service. "With Nutanix Files, we can provide different types of file shares for our users at different locations—and we can do that with just a few clicks. This is a solution that fits perfectly with the requirements of medium-sized businesses," says Martin Holler.

With support from IF-Tech, ROFA Group set up two Nutanix clusters in its data center. Together, they migrated most of the virtual machines (VMs) to one cluster, including infrastructure services, business applications such as the DMS, and some Fortinet security solutions. The workloads were moved to Nutanix's own hypervisor AHV without a single minute of downtime.

Via the second cluster, the ROFA Group today primarily provides file services for various locations. Nutanix Files offers the IT organization maximum flexibility. Administrators can, for example, easily set up standard SMB shares for managing project data. Different user groups—from production to sales to project management—are thus granted secure and uncomplicated access to all the files and documents they need for their tasks. Nutanix Files furthermore offers the option to set up so-called distributed shares. The main file server directories are distributed across multiple file server VMs on the Nutanix cluster to increase resilience and enable load balancing.

"With Nutanix Files, we can replace the local file servers at many locations and replace them with a highly available and centrally managed solution," summarizes Martin Holler. "This gives us full control over access to our data, and we benefit from built-in features for improved security and efficiency." For example, analytics and monitoring capabilities help administrators detect anomalies and identify suspicious user behavior that could indicate data theft. Known ransomware signatures are also automatically identified and blocked. Access to files and changes to the authorization structure can be documented without effort if this is required for audit purposes. In addition, Nutanix Files improves user experience with the Self-Service-Restore: users can now restore accidentally deleted files on their own.

RESULTS

A significantly more efficient infrastructure with decreasing costs

The initial investment for the Nutanix platform was comparable to the cost of deploying a new SAN solution. "Nutanix, on the other hand, provides us a complete infrastructure, plus a host of additional value-adds such as the enterprise file storage service, one-click upgrades, and higher resilience," Patrick Kurz reports. "With unified centralized management, we also expect to realize savings on ongoing TCO."

Future-proof IT architecture with flexible scalability

ROFA Group was able to perfectly address the current performance requirements of its IT with the two Nutanix clusters. There is also still sufficient capacity available for the planned deployment of the ERP and PDM systems. When new applications require more computing power or file services need more storage, the Nutanix platform can be expanded simply by adding more nodes—and this can even be done while the system is running. "We can grow practically without limits with the platform and are thus also prepared for new requirements due to digitalization," says Patrick Kurz.

High availability through multiple redundancy—even across geographically distributed locations

A major advantage of the Nutanix platform for ROFA Group is its built-in resilience. Should a node in the cluster fail, for example, users are automatically redirected to the remaining nodes. Important services such as the software for two-factor authentication therefore still will remain accessible. High availability across multiple locations is also possible with Nutanix. Meanwhile, ROFA Group has already deployed two more Nutanix clusters in Poland and Hungary and set up protection domains between the various locations. This would allow virtual machines to be restarted remote at other locations in the event of a complete cluster failure.

OUTLOOK

Currently, ROFA Group is working with IF-Tech on a comprehensive data protection concept based on Nutanix Mine with Veeam. The goal is to implement a complete offsite backup with fast recovery capabilities for the entire HCI infrastructure. Nutanix Mine also can be easily scaled and is centrally controlled through the Nutanix Prism management console. "The solution fits seamlessly into our environment and provides us with comprehensive data security for critical applications such as our ERP system," says Martin Holler. "Especially for projects like this, it's great to have a partner like IF-Tech on our side. The company's specialists not only are providing us with the necessary Nutanix expertise, but are also supporting us in the integration of other technologies."

PARTNER

IF-Tech AG

IF-Tech AG, headquartered in Munich, specializes in consulting around IT infrastructure solutions in the areas of Work 4.0, virtualization, and cloud computing. A team of experienced consultants and IT experts accompanies customers from the initial strategic consultation through implementation to ongoing operation and as a cloud-service provider—anywhere in Germany and across all industries.

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