PostFinance makes banking a simple pleasure

■ NetApp



PostFinance -

Swiss bank keeps omnipresent files going with NetApp flash and MetroCluster IP.

PostFinance is a diversified, innovation-driven financial services provider that offers its customers smart solutions for all their banking needs. In doing so, PostFinance relies on forward-thinking tools and technologies that are developed or adapted specifically for the Swiss market. NetApp® systems provide the file data for secure banking transactions and speed up the development of financial products and services with persistent storage.

Smoothed
DevOps
processes by
carefree storage
allocation

"NetApp caters for persistent storage. It's the only way we can provision around 800 shares automatically. No tickets. No waiting times. Everybody wins."

André Kocher Senior Systems Engineer, PostFinance

It's important for financial matters to be straightforward for PostFinance's 2.7 million customers. They receive personal advice on investments, financing, and retirement planning. A comparison platform helps them find the best mortgage. Digital tools range from direct banking and mobile payment to an innovative 3-in-1 app for paying, saving, and investing money. Creative minds and an experienced IT team make all that happen.

Modern core banking system

Of about 3,600 employees at PostFinance, more than 600 work in IT. They manage one of the most modern core banking systems in the Swiss financial center, operate highly integrated components, and provide internal resources.

Cloud, blockchain, and open-source technologies are standard at PostFinance. NetApp storage for file services is vital in myriad operations, enabling applications and systems to exchange, process, and consume file data nonstop. Temporarily exported data can be reliably cached during events such as database releases. In addition to application shares, NetApp storage also keeps 500 user shares from software development ready for access.

"Files are everywhere. Applications and microservices in core and mobile banking need them, as do users from software developers to consultants in the post office. Since file service is business critical, we work with NetApp. Our experiences are very good. I don't know of any failure with NetApp storage as the reason," said André Kocher, senior systems engineer at PostFinance.

PostFinance has anchored the file service in its private cloud and configured the storage by using the MetroCluster feature of ONTAP®. Synchronous data

mirrors between the data centers in Bern and Zofingen, 100 km away, enable disaster recovery. If one site were to fail, file service would be seamlessly provided from the second site and operations would continue.

Developing faster and better

Whether at a post office ATM, at the counter, or on a smartphone, clients expect everything to work all the time and everywhere, and services should improve constantly. But those goals are achievable only with DevOps and agile practices in IT. Consequently, more and more applications and components, even in core banking, are microservices at PostFinance. They run in Docker containers and with orchestration through Kubernetes. Aligning specifics of platforms like iOS and Android, business requirements, and technical caveats with each other and the IT landscape is a constant process.

PostFinance can implement new functions, services, fixes, and release cycles quickly and securely. The secret to success is NetApp's ability to deliver persistent storage resources to Kubernetes through Astra™ Trident. Developers can use self-service to mount, use, and discard storage. Kubernetes takes care of capacity allocation within hard quotas.

"NetApp caters for persistent storage. That makes things easier for IT and users. It's the only way we can provision around 800 shares automatically. The administrative effort for persistent volume claims is zero. Users can manage their own storage needs. No tickets. No waiting times. Everybody wins," said Kocher.

PostFinance automates processes where possible, including self-service restores from NetApp Snapshot™ copies. To minimize data loss, IT applies hourly Snapshot copies to create file system images. These point-in-time copies serve lightning-fast restores directly off the storage, and they are backed up centrally.



Better performance, convenience as usual

Even the best systems eventually need renewal. After 6 years of permanent operation, the file storage was ready for a refresh. Performance, scalability, replication, unified operations for UNIX and Windows shares, support quality, manageability, migration concept, and more were factors in the decision about a vendor and product. NetApp AFF A400 systems with NVMe storage for fast data access won, once again configured as a MetroCluster cluster, but now for IP.

"With NetApp, everything was right in terms of technology. Other vendors could either not do a nondisruptive migration, or not as easily as NetApp," said Kocher.

PostFinance works directly with NetApp, and it also relies on the expertise of its long-standing IT partner BNC Business Network Communications. In situations such as migrations in a 24/7 environment, it comes down to close and trusting teamwork.

"BNC is a competent and experienced partner, so the migration to the new all-flash systems was smooth and fast," said Kocher. "BNC integrated the new nodes into the existing MetroCluster cluster. 200TB of data was automatically copied and mounted from

disk to flash. Once the synchronous mirror was up and running, we pulled the old nodes out of its racks. And that was it. Human, machine, application, or microservice, all file users enjoyed continued operations as if nothing had happened."

Once again, PostFinance is up to date with storage and can easily absorb peak loads. Users and IT administration appreciate the typical operating convenience and the flash performance boost. Proven routines, such as backup and disaster recovery, largely stayed in place.

Invest to save

"Today you can use IP instead of Fibre Channel without sacrificing security, availability, or performance. And it's less costly. MetroCluster IP helped us to simplify the storage network and reduce its costs," said Kocher.

Efficiency methods like data compression, deduplication, and compression at the volume and aggregate levels help PostFinance save on capacity and expansion steps. Combined with NetApp's all-flash technology, PostFinance can store almost twice as much data as it has capacity in place.

"NetApp is a big player in file services and NAS and a first-class partner for high performance and secure storage. We know that our data is in good hands on NetApp storage, and we appreciate the excellent support," said Kocher. "The systems just run and cover any storage need. Our teams are very pleased."

Tackling new topics

As a long-standing partner, NetApp knows
PostFinance's infrastructure. That familiarity makes
it easy to discuss new topics like ransomware
protection. PostFinance could, for example, use
the NetApp FPolicy interface and employ external
security solutions to monitor the stored data. Another
option is to use NetApp's on-box machine learning.
As soon as a security risk is detected, the system
automatically makes a Snapshot copy to freeze a
clean dataset for fast recovery.

"We want banking to be simply a pleasure. To reach this goal, we rely on partners like NetApp and BNC. They respond to our concerns and provide professional help with a great deal of commitment so that we can concentrate on our core business," said Patrick Hofmann, Head of Enterprise & Shared IT Services and deputy CIO and COO at PostFinance.



NetApp products

AFF A400 storage with 4 nodes MetroCluster IP ONTAP Snapshot Astra Trident

Channel partner

BNC Business Network Communications AG







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About NetApp

In a world full of generalists, NetApp is a specialist. We're focused on one thing, helping your business get the most out of your data. NetApp brings the enterprise-grade data services you rely on into the cloud, and the simple flexibility of cloud into the data center. Our industry-leading solutions work across diverse customer environments and the world's biggest public clouds.

As a cloud-led, data-centric software company, only NetApp can help build your unique data fabric, simplify and connect your cloud, and securely deliver the right data, services and applications to the right people—anytime, anywhere. To learn more, visit www.netapp.com

