Enabling cloud-native experience with existing on-prem infrastructure

SWISS TXT provides customers with self-service storage for managed Kubernetes service called Cargo.

Business needs

Customers need fast access to SWISS TXT’s hosted storage resources for its managed Kubernetes service called Cargo to run a broad range of applications, such as digital media operations, APIs, IoT and Big Data. Previously, SWISS TXT’s manual provisioning of storage was slowing service delivery to customers. SWISS TXT developed a managed Kubernetes service with self-service storage provisioning using Dell EMC PowerScale storage and its Container Storage Interface (CSI) Plugin. The result: time and cost savings and accelerated service delivery.

Business results

- Storage provisioning reduced from 2–3 days to seconds.
- Administrative time savings.
- 90% reduction in costs for short-term storage.
- Extension of existing hardware for modern workloads.
- Self-service storage for customers.

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Joshua Hügli
Linux System Engineer,
SWISS TXT

Solutions at a glance

- Dell EMC PowerScale
- Dell EMC Container Storage Integration (CSI) Plugin
SWISS TXT, a provider of cloud services, video solutions and accessibility services, knew there had to be a better way. A subsidiary of SRG SSR, Switzerland’s largest public broadcasting company, SWISS TXT found that on-demand storage and manually provisioning storage were impeding speed and efficiency of delivering services to SRG business units and other IT companies. Further, these processes were not adapted to modern application delivery.

The company responded by integrating existing storage solutions into their innovative managed Kubernetes solution. At the heart of this solution are Dell EMC PowerScale scale-out storage and PowerScale Container Storage Interface (CSI) Plugin, a standard API that enables integrating existing storage systems to be provisioned in an on-premises cloud-native environment.

Storage delivery slashed from days to seconds
Joshua Hügli, Linux System Engineer at SWISS TXT, says, “The PowerScale-CSI project is a big success for SWISS TXT. Customers can order underlying storage for Cargo, our managed Kubernetes service, in seconds. Before, they would spend two to four hours creating a ticket and coordinating with us and wait two to three days to receive the storage.”

Using the cloud-native CSI and PowerScale container storage technologies, SWISS TXT provides customers with automated storage operations, including provisioning, resizing and creating snapshots. Customers can also analyze and reallocate their storage consumption for optimal efficiency.

“We estimate that the ephemeral storage feature has decreased short-term storage costs by 90%.”

Josef Vogt
Linux System Engineer,
SWISS TXT

“Customers used to skip snapshotting prior to upgrades because of the time involved in submitting requests,” explains Hügli. “Now, they create their own snapshots and delete them once they verify upgrades. Self-service snapshotting saves customers administrative resources. It also improves reliability since they can restore from the snapshot in case of failed upgrades.”

Ephemeral storage reduces costs by 90%
Previously, when customers used artificial intelligence for transcoding media files, for example, there often was not enough temporary storage capacity in the disks of the nodes in the cluster. SWISS TXT would need to increase storage capacity of all nodes to support these short-term uses.
By using the CSI plugin for PowerScale, SWISS TXT provides customers with temporary storage volumes that are sized according to their requirements.

Josef Vogt, Linux System Engineer at SWISS TXT, states, “With our Dell EMC solution, ephemeral — or temporary — storage has eliminated the worry about large media files or other factors spiking short-term demand for storage. We estimate that the ephemeral storage feature has decreased short-term storage costs by 90%.”

Cloud-native service opens door to growth

SWISS TXT also highlights the relationship with Dell Technologies. Hügli observes, “The Dell Technologies partnership has been very collaborative. They responded quickly to any questions or support we needed to develop this new solution. The collaboration went further in discussing features and implementation of features that have been since included in the driver.”

Looking ahead, SWISS TXT sees growing demand from the SRG SSR business units and other IT companies for its new container-based service called Cargo. In addition, the flexibility and transparency of the open source-based Dell EMC solution enables SWISS TXT to independently access and contribute to the code to keep ahead of evolving market demands.

“By enabling a cloud-native experience, the Dell EMC solution has extended the use of existing on-premises hardware for modern workloads,” states Hügli. “We can build and deploy software faster and speed time-to-market of services while reducing operational costs. We have an agile infrastructure to support business needs today and into the future.”

Joshua Hügli
Linux System Engineer,
SWISS TXT