



FESTIVAL-READY SERVERS AND STORAGE WITH VMWARE



Locarno Film Festival

CUSTOMER

LOCARNO FILM FESTIVAL

WEBSITE

WWW.LOCARNOFESTIVAL.CH

INDUSTRY

MEDIA

LOCATION

LOCARNO, SWITZERLAND

KEY CHALLENGES

- Increase storage capacity
- Improve performance
- Ensure system reliability and flexibility

SOLUTION

The Locarno Film Festival turned to VMware partner 4IT Solutions for the implementation of a virtual storage infrastructure managed by VMware vSAN and based on hyper-converged HPE servers.

BUSINESS BENEFITS

- Storage capacity doubled
- Data access speeds increased tenfold
- System reliability, flexibility and scalability achieved with limited investment

How do you put on an international film festival with infrastructure at the end of its useful life, and a need to handle great peaks of activity – all while ensuring reliable services and Festival-ready performance levels? The Locarno Film Festival looked to hyper-converged infrastructure for servers and storage, building a robust cluster with VMware vSAN in collaboration with VMware Partner 4IT Solutions. In anticipation of the upcoming festival, flexibility and reliability in servers and storage were ensured with limited investment, and performance increased tenfold.

Over the 72 years of its history, the Locarno Film Festival has held a unique place within the panorama of the most prestigious film festivals. For 11 days every August, this town in the Swiss canton of Ticino becomes the world capital of art-house cinema. Thousands of film professionals and enthusiasts come to Locarno each summer to share their passion for the latest discoveries and for film in general in all its many facets. In Locarno, they find a quality calendar rich with an amazing array of eclectic events that bring together emerging talents and a great many prestigious guests.

The Challenge

Those who work on the stupendous, artistic organizational machine that is the Locarno Film Festival measure time not in years, but in “festivals”, and Malcolm Tunzi, Head of Information Technology, has been a member of that team for 12 festivals. Over that time, he has seen his information systems grow in order to ensure service reliability and architectural flexibility, even as the number of users increase each year in a recurring cycle.

“IT assets have adapted in lockstep with various organizational needs. The team at the start of the year is made up of 25 people, but that balloons to a total of some 750 employees closer to the time of the festival,” Tunzi explains. The festival is held each year during the first half of August, and the entire organizational structure adapts during the year to best serve the event. At peak times, festival staff manage over 280,000 people in box offices, theaters, the Piazza Grande city square, and throughout the rest of the city of Locarno. During these crucial days for those working behind the scenes, everything needs to come off without a hitch, starting with the IT infrastructure.

Until 2018, the box office applications, database, and all back-office systems for the festival were entrusted to a cluster of servers that had reached the end of their maintenance cycles. In order to ensure the systems had the levels of efficiency and reliability required, a plan was defined to upgrade the server and storage infrastructure. Now they needed to decide which architecture to choose. Tunzi turned to VMware Enterprise Solutions Partner 4IT Solutions, a

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MALCOLM TUNZI
HEAD OF INFORMATION TECHNOLOGY
LOCARNO FILM FESTIVAL

VMWARE FOOTPRINT

- VMware vCenter
- VMware vSAN
- VMware vSphere

PARTNER



systems integration firm with extensive experience working with the festival, in order to assess the various options available.

The Solution

The experts at 4IT Solutions drew up two upgrade options. For the first of these, the festival would purchase new servers and new dedicated storage equipment. This architecture would provide reliability and performance, but would lack the flexibility so badly needed by an organization that needs to be able to handle major shifts in activity. It would also come at a significant cost, an aspect to consider with care for a non-profit organization with a limited budget. The second option called for new servers with a hyper-converged architecture in order to provide hosting and storage services at the same time. Seeing the flexibility and cost savings that the second option would provide, Tunzi and his team chose a hyper-converged solution with VMware vSAN on vSAN ReadyNode servers from HPE.

Dynamic handling of storage virtualization has been entrusted to VMware vSAN, a solution that uses off-the-shelf x86 servers and VMware storage virtualization software in order to simplify operations, reduce total cost of ownership, and scale quickly. “The hyper-converged architecture makes it possible to purchase a single type of server without dedicated appliances and with standard components that are less costly and easier to find on the market,” explains Raffaele Amoia, Technical Account Manager for 4IT Solutions. “The storage virtualization made possible by VMware vSAN also provides a flexible, scalable storage solution.”

The greater flexibility and cost effectiveness of the hyper-converged solution convinced Tunzi, who had previously a wide experience on Server Virtualization. “In March 2018, the team at 4IT Solutions set up vSAN, installed the new servers, and decommissioned the obsolete ones, all without any interruption in service. The entire implementation was done in a flash,” said Tunzi.

The Benefits

“With VMware vSphere and VMware vCenter Server, we are able to manage all our virtual machines, both as hosts and as storage appliances, and we have more CPU power, greater storage capacity, and faster data access speeds,” Tunzi explains.

Available storage space has doubled with the move from 6 to 12 TB. In each server, the storage system is divided between two SSD and twelve traditional disks. The reading and writing of “hot” data is managed in flash memory before being shifted to more traditional storage once consolidated, without any fixed assignment of disks to the physical or virtual machines. Data transfer from one unit to another is handled automatically by vSAN.

“The performance of the system managed by VMware vSAN in terms of the reading and writing of data has practically increased tenfold, going from roughly 4,000 to over 40,000 IOPS,” says Raffaele Amoia at 4IT Solutions. “This improvement is particularly noticeable when using back-office applications and accessing the databases.”

The system has proven to be easy to manage and maintain. After the setup by 4IT Solutions’ technicians and a VMware training course on the topic, Malcolm Tunzi and his IT team are now able manage it entirely on their own. “Knowing our data center well and having a tradition of virtualization that began years ago with vSphere 5, the transition to the vSAN system was just about

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RAFFAELE AMOIA
TECHNICAL ACCOUNT MANAGER
4IT SOLUTIONS

immediate,” says Tunzi. In terms of hardware, the three HPE servers managed in a single, failover cluster are certified for vSAN and make it possible to turn to either HPE or VMware support, for any needs that should arise.

“Our information systems are readier than ever for the upcoming festival. The new server and storage infrastructure based on VMware vSAN gives us all the reliability and flexibility we need, and with a significant increase in performance,” Tunzi concludes. “It’s a platform that opens our data center to the possibility to further expand with a limited investment.” Indeed, the infrastructure based on hyper-converged servers can be expanded by purchasing new servers and simply upgrading the licenses.

