Consolidation of ALEF's Training Center infrastructure built on CISCO & NetApp

ALEF

NetApp — Distributor Partner

CISCO Partner

ALEF's IT Training: Hands-On Learning Across Europe

IT Training is an integral part of ALEF's overall business. ALEF's training unit operates through eight training centers across Eastern and Southeast Europe. Most of these training require live labs and newest, up-to-date software releases.

To keep smooth operations, we need to use a dependable, secure, and robust IT infrastructure. For this, for more than a decade, we are using:

- CISCO blade servers
- NetApp Hybrid storage systems
- VMware as the virtualization platform

With every new training introduced in our portfolio, the capacity and performance needs of supporting data storage systems are growing. Our advantage is that we are internally capable of supporting all parts of the system and do not need an external provider to manage it.

Continuously upgrading and staying current

In the beginning, we were using CISCO rack servers and NetApp FAS2220. Later on, we added FAS2240-2 and FAS2552.

Such infrastructure became complex and inefficient to manage.

We wanted to introduce a single system that would consolidate all data and, at the same time, try to extend the life of some of the existing systems.

In the moment of consolidation, FAS2220 and FAS2240-2 were EOS (although working like a charm for more than ten years), so we decided to decommission them and leave only FAS2552 as repository for cold, unfrequently used data blocks from new AllFlash system.

Move to FlexPod architecture

We decided to use FlexPod best practices in combining CISCO compute and networking with NetApp newest AllFlash technologies for storing data.

We replaced the rack servers with the **CISCO blade chassis**.

For the primary storage system, we chose FAS2750 in All-SSD configuration. All cold data from that system are tiered to FAS2552 by utilizing Cloud Tiering technology (formerly known as FabricPool) in a real-time.

BTW, Cloud Tiering is free-of-charge when used between any ONTAP-based S3 systems (FAS, AFF, CVO).

This enabled us to save 50% on SSD capacity installed on FAS2750 without losing a single functionality or making an environment more complex. For the outer world (servers) Cloud Tiering is invisible.
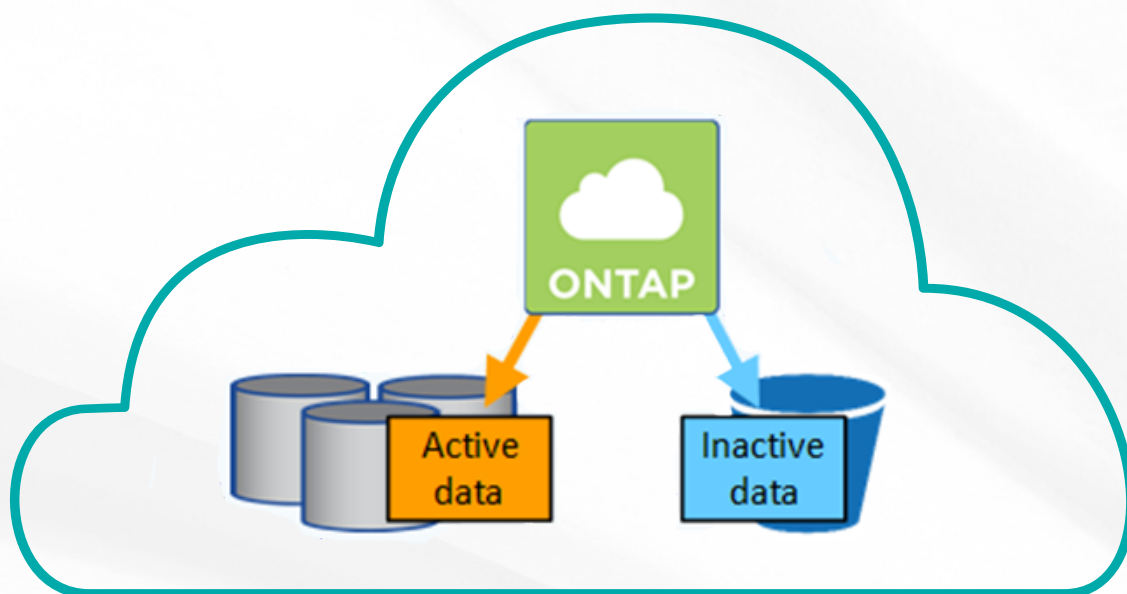
The other benefits of ONTAP we use extensively on newly acquired FAS2750 are efficiency features (**deduplication, compression, and compaction**), saving us an additional **75% of SSD space** on FAS2750. With both Cloud Tiering and efficiency features turned on all the time, we are experiencing **0.5ms latency** which is just fine, not just for our needs to days but for many years to come.

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