

Konecta Experiences Accelerated Performance with Intelligent Infrastructure

VMstore

The Konecta logo is rendered in a blue, sans-serif font.

Madrid-based Konecta is a provider of business process outsourcing (BPO) and other innovative technology solutions. The company currently operates across ten countries with more than 54,000 employees, delivering sophisticated IT solutions in the areas of telecommunications, contact centers, and other multichannel solutions where strong reliability and robust IT infrastructure are crucial.

The Challenge: Frequent Crashes with Key Voice Applications Due to High Latency

Konecta's IT environment is comprised of two data centers, one in Madrid and the other in Barcelona, and three virtualized Avaya switchboards with two recording systems, one from Avaya and another from Nice. The entire platform has been virtualized using VMware vSphere, with a total of 480 VMs configured for high availability and disaster recovery between data centers.

"We process more than one million simultaneous calls each day that have to be registered, processed, and stored in real-time," explained Asier Lopez, Director of Systems Architecture at Konecta. "Our department is responsible for ensuring that all of our IT systems can support those heavy workloads. Unfortunately, with our HP blades and EMC VNX storage systems, we were experiencing some technical difficulties due to latencies in excess of 30ms."

The Solution: Tintri VMstore

Konecta enlisted the help of IT solutions provider Azuba Collaboration Services for its upcoming infrastructure upgrade project. Azuba is a Spanish company providing advanced IT technologies and innovative services for the Next Generation Data Center. "After reviewing their challenges, we identified Tintri VMstore as the right solution for their environment," explained Javier Roger, Azuba's CTO. "With the ability to manage hundreds of thousands of virtual machines hosting mission-critical applications, combined with the Tintri Global Center management console offering real-time insight, VMstore provided everything that Konecta needed."

Konecta purchased its first Tintri VMstore intelligent infrastructure through Azuba in 2016. "Tintri's ability to provide end-to-end visibility into our VMs was very important to us," explained Asier López. "The control over storage latency and the VM-level management functions were key factors in our decision as well. High performance and ease of use were also essential, due to the excessive management complexity and performance issues we faced in our previous environment."

The most performance-demanding systems at Konecta are the DB2 databases that support its customer relationship management (CRM) system. The DB2 systems were running on HP physical blades with directly connected storage blades, with rotational disks and SSDs, in a RAID1 configuration. "With the remaining space on the VMstore system, we decided to virtualize one of these machines," commented Lopez. "The implementation of this CRM and database on the physical infrastructure took less than five minutes. When we virtualized it on VMstore, it only took two minutes to implement."

Challenges

- Frequent crashes with virtualized voice applications due to excessive latency
- Slow replication between disk arrays hindered disaster recovery
- Deteriorating recording system processes

Solution

- Tintri VMstore™ All-Flash Systems

Results

- Simplified management with one datastore to replicate VMs between data centers.
- Reduced datacenter footprint from 5RU to 2RU, consolidated data from 27GB to 7.8GB
- Reduced average storage latency from 30ms to less than 0.2ms
- Improved disaster recovery with an RPO <1 hour and an RTO of <15 minutes

The Results: Increased Performance, Reduced Maintenance Time, Increased CAPEX and OPEX

"A few days were enough to confirm the benefits of using VMstore with our workloads," reported Asier López. "We were able to reduce all application latencies to under 1ms, and obtained much better deduplication ratios than expected. The proven characteristics of VMstore, the PoC results, and the attractive pricing were all factors in our decision to go with VMstore."

The majority of Konecta's virtualization environment is now running on VMstore. "We have already moved seventy-two VMs over to our new VMstore T5060," Asier Lopez said. "By upgrading to VMstore, we were able to reduce our datacenter footprint from 5RU to just 2RU, and go from 27TB to just 7.8TB of data using VMstore's deduplication and compression capabilities."

"The VMstore systems performed much better than expected in both our test and production environments," Asier reported. "Latency is very critical for virtualized workloads, especially with voice applications. By moving to VMstore, our average disk access latency dropped from over 30ms to just 0.2ms. In addition, our batch processes are taking about one-fourth of the time to finish on VMstore compared to the EMC VNX systems."

VMstore has also improved replication efficiency for Konecta. "We maintain 48 crash-consistent and two VM-consistent snapshots of each virtual machine," noted Asier López. "We replicate 423.5MB of data each day, and the snapshots occupy 500GB of space. The replication processes are incredibly fast and easy with VMstore. By moving to VMstore, we were able to improve our recovery point objective (RPO) to < 1hour, and a recovery time objective (RTO) to less than 15 minutes."

"The ease of VMstore management has been quite a surprise, considering how powerful the systems are," Asier Lopez shared. "It is very easy to replicate VMs between data centers. We don't have to use vMotion anymore, since there's only one datastore with VMstore. It is an incredibly simple platform to manage and administer."

"Before buying from Tintri, we were worried about their ability to support us in Spain," admitted Asier. "But our worries were unfounded. We received excellent support throughout the PoC, as well as in production. Tintri even managed to provide us with support in Spanish, which makes it much easier for our IT organization to get answers to their questions. Tintri Support has always been very responsive, and all of our issues have been quickly solved."

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*Asier Lopez, Director of Systems Architecture,
Konecta*

Experience Different! For more information on how Tintri VMstore can turbo-charge your business success through a simple, Intelligent Infrastructure, visit tintri.com/vmstore.