Ports of Genoa: an Italian excellence

The Western Ligurian Sea Port Authority, set up in 2016, includes the ports of Genoa, Pra, Savona and Vado Ligure, which together constitute the most important Italian maritime region. More than 30 specialized terminals, able to accommodate even the largest ships due to the depth of the seabed, handle around 70 million tons of goods annually. The four ports also welcome millions of cruise liner passengers in transit to various destinations every year. Naval shipbuilding services employing some 36,000 people are also significant and renowned industrial assets. The union of these ports, which three years ago were integrated into a single structure, was a challenge from both an organizational and management point of view. A challenge overcome, thanks to Zerto.

Zerto guarantees the perfect functioning of a complex IT structure

The Port Authority has a complex IT structure that required an innovative architectural approach which was implemented by setting up two active-active data centers. The services were delivered by cross-replicating the virtual machines using Zerto software to guarantee the accessibility and reliability of both the hardware and the networking. Using Zerto allowed a physical migration of the data center to the new institutional headquarters in Savona. During this migration all the physical servers were eliminated and all the services delivered by virtual infrastructure using VMware technology.

Marco Molinari, IT Manager of AdSP MALO: Why Zerto?

"We changed to Zerto because the previous solution was complicated to manage, required the intervention of many people and was not efficient. As soon as we investigated the characteristics of the Zerto solution we were impressed. We were interested in a solution more oriented to Disaster Recovery, which was fast, effective and user-friendly, and able to easily manage migration: Zerto offered us all of this. We had practical proof of this, although in an unfortunate way, during the fire of October 2018, which completely destroyed the Savona headquarters building: while the building was on fire, we started the Failover Now policies from the console of the Disaster Recovery site. A few minutes later, we had no offices and no computers. But all our data and files had been saved and only a few simple actions were needed. Zerto allowed us to continue providing services without a break, despite the fire destroying everything. Our organization does not directly manage the operation of the ports but operates on the administration side; it provides many services and analyzes data and secondary activities. The robustness and security of the port infrastructure are therefore important".

Although providing high performance, Zerto does not require special structures: with other software there would have been problems relating to hardware compatibility, with Zerto no.

Alessio Molinas
Systems Architect, Ports of Genoa
The advantages of Zerto

1. Ease of use
2. The ability to easily migrate from one data center to another
3. Management of disaster recovery and business continuity

Zerto is simple to use and our experience guarantees maximum performance in the event of disaster recovery

"It was fortunate that the fire occurred when the infrastructure was already configured with the new architecture and the Zerto solution, a factor that allowed us to return online within a few hours. It would have been possible to do it in just a few minutes, but other problems arose due to the loss of the offices and computers", says Marco Molinari. "Zerto was definitely an unbeatable solution: we verified that the data had been preserved up to the moment when there was availability of electricity and network connection to the secondary site: we can say that we didn’t lose any data managed with this solution. By the same evening we had already reactivated the main services. All this was crucial because, exactly one week after the fire, a violent storm surge destroyed part of the docks, piers and infrastructure of the ports of Savona and Vado Ligure. Being able to give operational support to the port management with the tools that had already been reactivated was essential."

Zerto allows migration from one data center to another, easily

"When we moved from the old headquarters to the new one, we relied on Zerto", explains Alessio Molinas, Systems Architect. "Migration of the machines was quick and easy, with almost zero downtime. This helped us because in the meantime we managed to physically move the servers to the new data center, configure them and perform all the necessary operations to put them into operation. We then balanced the two sites with cross replication. Reverse-replication on the sites is an operation we do twice a year since having Zerto. The virtual machines of the Western Ligurian Sea Port Authority are covered by Zerto and organized in mirror data centers."

Zerto provides maximum protection against all cyber threats

"Although providing high performance, Zerto does not require special structures: with other software there would have been problems relating to hardware compatibility, with Zerto no. We intend to use the replicated copies in the event of other critical issues and we are confident of the potential offered by Zerto. To sum up, Zerto has proved to be the perfect partner from all points of view."