

ANA AEROPORTOS DE PORTUGAL**LOCATION: PORTUGAL | INDUSTRY: TRAVEL**

StorMagic SvSAN keeps Lisbon Airport moving with a cost effective solution maintaining uptime for vital docking systems

**Business Challenge**

As the Portuguese airport authority, ANA Aeroportos is responsible for managing 10 of Portugal's public airports, including the country's largest - Lisbon Airport - which is also known as Humberto Delgado Airport.

Lisbon Airport is the main international gateway to Portugal and a major European hub, ranked 24th largest in Europe by passenger volume. In 2016 it served 22.4 million passengers, the most in its history. It is the most strategically important European hub to Brazil, and is also one of the most important European hubs to Africa.

As passenger numbers increase and pressure on the airport's infrastructure grows, ANA are tasked with operating the airport and maintaining a high level of service, while allowing airlines to meet their own service levels and punctuality targets. A vital element to achieve this is the airport's Advanced Visual Docking Guiding System (A-VDGS). This allows pilots to quickly and efficiently dock their aircraft, ensuring the planes

remain clear of obstructions and that the jetways can reach the plane doors.

The manufacturer of Lisbon Airport's A-VDGS, Swedish company FMT, recommended the airport refresh the infrastructure running the guiding systems. The overhaul would be overseen by Pedro Ponte, IT Consultant for ANA Aeroportos at Lisbon Airport.

Solution

The IT systems running the A-VDGS in Lisbon had become old and outdated. Right from the outset, cost was a major factor as the search for a replacement began. The project's total budget was strictly controlled and needed to include all the server hardware, software and a new highly secure network for this critical project. The airport needed new servers which could be spread over multiple locations for disaster recovery and full redundancy. This was critical as the guiding systems are an integral part of the airport's operations. An additional aim of the project was to allow the airport to utilize all of VMware's features included with their



“I can’t believe how easy and reliable StorMagic SvSAN truly is. The Lisbon airport now has the confidence that our airplane docking/guiding system can survive almost any type of failure, and we saved a whole bunch of money along the way.”

Pedro Ponte, IT Consultant, ANA Aeroportos de Portugal

Enterprise edition of vSphere, but VMware’s virtual storage solution proved too expensive. Thanks to its full compatibility and integration with vSphere, Pedro’s team was able to select StorMagic SvSAN to provide the highly available virtual storage on which the A-VDGS would run, at a fraction of the cost of VMware vSAN.

StorMagic SvSAN was deployed in two locations 1.5km apart within Lisbon Airport (each with its own fully redundant power) to ensure redundancy and mitigate against localized disasters that might result in unscheduled downtime. Within a couple of days of deploying SvSAN, Pedro’s team was able to create a fully redundant scenario - validating SvSAN’s capabilities in delivering a highly available solution which eliminates downtime. Pedro couldn’t believe the results; “it was really amazing” he said when describing how quickly and easily SvSAN was set up and

operational. Another key benefit that ANA has realized from the project is that even planned downtime for this application was completely eliminated. Whenever there is a need to update servers (hardware, software, firmware) they are able to fail one server and let the active server temporarily handle all IO, and then fail-back and update the second server. This saves the IT team considerable time and effort and allows updates to happen during operational hours.

Why StorMagic

The project at Lisbon Airport was a simple, but critical one. ANA needed a lightweight, low cost solution that would deliver high availability in a virtualized environment. SvSAN fitted this bill perfectly, and Pedro describes implementing SvSAN as “easy, cheap and reliable”. SvSAN’s simple two node architecture and straightforward deployment allowed Pedro and his team to have the solution up and running very quickly and consuming minimal resources. This simplicity also generated cost savings - with the strict budget that ANA were operating to, they needed a solution that was affordable. SvSAN came in considerably below the cost of competitor solutions without compromising on any of the features necessary to ensure the airport’s guiding system remained online and functioning. A simple, cost effective solution keeping Lisbon Airport’s vital systems online - it’s StorMagic SvSAN.

Server Configuration (Per Server)	
Hardware	Dell PowerEdge R730
CPU	4 per server
Memory	96GB per server
Storage	5x 2.5" 15K hard disks (RAID5) with a total capacity of 1TB, plus 2x 250GB SSDs (RAID1)
Networking	1Gb Industrial-grade Ethernet
Hypervisor	vSphere Enterprise Edition
Applications	Lisbon Airport’s Advanced Visual Docking Guiding System (A-VDGS), manufactured by FMT. A system designed to help guide planes as they park, ensuring they avoid obstructions and are aligned correctly with the jetways.
Data Protection	VMware tools

