

“An excellent IT area is the one we never hear about” – CEO Fertagus

Fertagus, a rail network company under the umbrella of Barraqueiro Group won the public international contest for the railway exploitation of the north/south passage launched by the Portuguese state in 1997 and began its activity in 1999.

It was the first contract in the exploitation of a public transport service that included passengers after the split between the offer of transportation services and the management and maintenance of the railway infrastructure.

In 2011 Fertagus were the first public private partnership that operates without any government funding. Every investment made is done considering a quick ROI, so system optimization is vital.

Fertagus main activities include:

- Transportation service in North/South railway (54Kms length)
- Bus transportation in connection with railway stations - Sulfertagus
- Maintenance service of UQE's (trains)
- Management of 6 stations in the south, from a total of 14 plus Maintenance Facilities
- Commercial areas management (121 shops)
- Parking management – 8.500 places

IT Infrastructure

Fertagus's administrative network consists of a 2-node DELL® cluster with EMC® fibre storage, holding 8 virtual machines and Microsoft® Hyper-V®. They also have a backup server hosted at a different site. The ticketing central system is run mainly on a Microsoft SQL Server®. Our administrative desktop layout has about 70-80 desktops and laptops.

Problem/Solution

António Soares Systems Manager for Fertagus comments:

“We started noticing some delays in reporting with our central ticketing system which runs on a SQL server. The queries were just simply taking too long. I had previously heard of Diskeeper, and upon the very strong recommendation from our IT reseller I decided to test it on our systems.”

“Initially our Server had 40% fragmentation across the volumes. After running Diskeeper we have near zero fragmentation and an overall 35% read and write improvement.”

Having seen the benefits of Diskeeper® on their SQL Server, António then rolled Diskeeper out across the rest of their systems, including a file Server and laptops.

“Our 2 year old Core™ 2 Duo laptops (Dell Latitude® E6400) suffered from heavy fragmentation resulting in crippled performance. After installing Diskeeper they are now much faster, and paired with Windows® 7 and Office 2010, they run like a Ferrari when opening applications, files and windows. Our laptops have now moved from a 3-year rotation period to a 4-5 year period because of Diskeeper.” Comments António

Fertagus running 8 VM's through Microsoft's Hyper-V then looked at a solution for the bottleneck issues that occur in virtual environments, and after initial inspection purchased V-locity, the virtual platform optimizer from Diskeeper Corporation.

António Soares states “The results after installing V-locity are also very evident, with our Cluster Server running much faster. I've even done some Diskeeper/V-locity demos to some partners as I am convinced that this is an excellent IT solution for systems administration.”

“As my CEO's once told me ‘An excellent IT area is the one we never hear about, everything is smooth and working as expected.’”

Further statistics gathered by Fertagus are as follows:

- File Server had a 34% performance boost
- The Database Server with V-locity installed improved 10% in I/O performance. The “Transaction Logs” (the worst affected), had the most improvement with 50% reduction in excess I/O's.
- The Exchange 2007 Database gained 39% in overall performance with IntelliWrite preventing 98% of fragmentation.