



# Trieste Marine Terminal supports growth through virtualized IT



## Objective

Upgrading the entire IT system, shifting to X86 server-based virtualized architecture to be able to use a brand new Terminal operating system.

## Results achieved

- An annual 15% increase in management capacity
- 24x7x365 operating capacity
- Simple management and maintenance

## HP products/services

- HPE Storage 3PAR
- Remote assistance

Situated inside the Harbor of Trieste, Trieste Marine Terminal (TMT) is a hub specializing in the handling of containers, in a location which makes it a natural gateway to the transit of goods into Central Eastern Italy and Central and Eastern European countries. Balanced import/export volumes, fast road and rail

connections, the possibility to quickly open new rail links and the systematic marketing activities in benchmark markets are the key features of the company, which is part of the TO Delta Group. In 2015 TMT handled some 450,000 TEUs (Twenty foot Equivalent Units).

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“We have chosen Infonet because we needed a partner that could support us - also in terms of expertise - in managing an IT architecture change, which we would have found hard to handle ourselves. It’s also for this reason that we have decided to use their remote assistance service”.

- Luigi Streri, Head of IT at Trieste Marine Terminal

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*Following the decision to completely change the IT system architecture, within a more general technology growth and investment plan, TMT has initiated a brand new strategy – thanks to the help of HPE and Infonet which has proven decisive – by choosing X86 systems, fiber optic storage and virtualization.*

Located in a strategic position for the handling of goods between Far East and Central-Eastern, Trieste Marine Terminal has raised the volumes under management over the years, with the aim of maintaining a positive trend in the future. Within a wider technology investment plan, the management have therefore decided to replace the Terminal operating system – core of all the hub – adopting NAVIS, a modern and complete software, fully developed by the US software house NAVIS.

“NAVIS will enable us to redesign all our processes in a more efficient way - explains Luigi Streri, Head of IT at Trieste Marine Terminal - thus allowing us, among others, to connect the central system to the software which manages cranes, to further automate the activities at the terminal. At the same time, we needed to envisage an increase in IT infrastructure performances and storage to support the growth of volumes and hence information”.

However, to be able to adopt NAVIS, TMT had to take an important decision to abandon the proprietary IT architecture they had previously adopted, thereby developing an X86 server based virtualized system instead.

It has been a remarkable step for TMT since three specialists work in the IT department and the competences to be able to migrate and manage the new architecture are still being enhanced. Therefore, a supplier and a partner were selected, which could guarantee state-of-the-art technology and adequate know-how.

Following a thorough analysis of several options, TMT chose six X86 servers and two HPE 3PAR fiber optic storage systems.

Besides operating efficiency, the company was seeking absolute continuity and availability, given that the terminal operates 362 days per year, 24h per day.

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“HPE and its 3PAR architecture have convinced us thanks to their performances, simple management and the clustering capabilities of the machines”.

- Luigi Streri, Head of IT at Trieste Marine Terminal

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*Thanks to the new Terminal Operating System, TMT will be able to raise the goods volumes under management by 20% a year*

### **Advanced technology and remote assistance**

With the help of Infonet and HPE engineers, Trieste Marine Terminal has implemented two different virtualized infrastructures (in VmWare environment): the former intended to support the terminal general services, the latter only for NAVIS, the new Terminal operating system. The IT configuration is complemented with Microsoft SQLServer environment and the Veeam backup system.

The two virtual infrastructures lie on two data centers located in different places of the terminal and connected by fiber optic, the standard for HPE 3PAR architecture, to guarantee business continuity in the event of malfunction or unexpected events.

Selecting the most appropriate storage was a natural choice. A modern architecture was being sought, able to ensure continuity, performances (in particular in terms of I/O), alongside easy management and clustering. HPE 3PAR could offer all this, but to achieve greater reliability, given that in-house expertise was not particularly developed in that kind of environments, Infonet was included in the project, as it was able to supply, among others, an effective remote assistance service, which, together with HPE engineers, could proactively warn in case of problems.

Thanks to HPE technology and the experience Infonet has gained, the system will be activated in May 2017, but the architecture monitoring activities are already running and have demonstrated considerable operating efficiency.

“The combination between HPE and Infonet is the perfect mix of innovation and know-how we had been looking for to undertake a path that is so innovative and important to us – continues Streri – but the most striking aspect is the helpfulness of all technicians who are always there to assist us”.

*Data Centers, located in two different places of the terminal and connected by fiber optic, ensure business continuity*

## **Future is automation**

With the support of Infonet, TMT has completed the various stages of the project which, once finalized, will envisage the activation of a customized 24h assistance contract by the partner (whilst the 3PAR systems will be directly supervised by HPE engineers).

“The investments in technological renovation by the company won’t stop here - concluded Streri. Part of the EUR 70 million allocated to renovating infrastructures and equipment will be invested to continue increasing innovation at the terminal, automating also the gate (for the entry and exit of trucks) and crane activities”.



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