

Business benefits



200% improvement

in operational support capabilities



50% reduction in maintenance costs



24/7 service continuity

for complete assurance in business operations

Business Challenges

TI is one of the largest providers of telecommunications services in the world with over 50 million subscribers. Competition continued to mount with each passing day in the telecom market and TI revenue streams were being challenged. Adding to its problems, procurement and maintenance costs on IT equipment continued to grow at over 10% each year. As a result, the operator was hard pressed to find a way to reduce OPEX.



Transformation

TI had seven data centers spread throughout the country. Sixty-six sets of storage equipment from multiple manufacturers needed to be replaced with 23 sets of Huawei OceanStor Dorado V3 all flash arrays. The Dorado V3 delivers exceptional stability and performance, and Huawei guarantees a 3:1 data reduction rate. TI was able to reduce its equipment room footprint by 83.6% and lower electricity costs by 92.8% in its hardware. The operator is able to save 54.3% in TCO and improve ROI by 55.5% over the first three years of deployment.



TI's Need for Updating Its Storage Layout

TI was able to maintain stable growth through continuous innovation and providing quality services. The century-honored enterprise had always been able to evolve with the times and was now providing fixed-line telephone, mobile, Internet, multi-media content, TV viewing, and other services in its complete portfolio. The group operates Telecom Italia, Telecom Italia Mobile, Telecom Italia Media, and Italia Telecom Lab and owns Olivetti and other companies that provide office and system solutions. TI has 35.3 million mobile and 22.8 million fixed-line telephone subscribers and has 29.2 million mobile subscribers in Brazil in addition to 10.7 million broadband customers in Europe.

TI revenues shrank as a result of the debt crises and economic slowdown that had hit Europe. At the same time, traffic on its networks was continuing to explode as 4G, the half-step in 5G, mobile Internet, and other accelerators started to become mainstream. The group estimated that the requirements on their storage space would grow by about 10% each year. TI was hard hit by the double whammy of having to increase its data storage capacities in the face of ever-decreasing budgets.

Huawei's All Flash Solution

The in-place network at TI was slowed by aging storage equipment and there was plenty of waste in terms of capacity because more closed-off systems were constantly being stacked to keep up with performance requirements. More equipment meant rising TCO. Even with the sprawl, many performance-intensive services still lacked the needed response. SLAs were incapable of satisfying requirements.

Flash-based storage was becoming mature when TI was planning on carrying out the replacement. However, most vendors lacked comprehensive data service capabilities. The operator began the hunt for a manufacturer able to fulfill all needs.

The new generation of Huawei OceanStor Dorado V3 all flash arrays delivers high performance and hallmarked high-stability. The data service capabilities of the Huawei solution satisfied all requirements and guaranteed a 3:1 data reduction rate in several service segments, including database, VDI, and server virtualization. Not nearly as many sets of equipment were needed in the new network in comparison to the traditional layout, greatly reducing the initial investment (a major determining factor in TI's decision to purchase Huawei OceanStor Dorado V3).

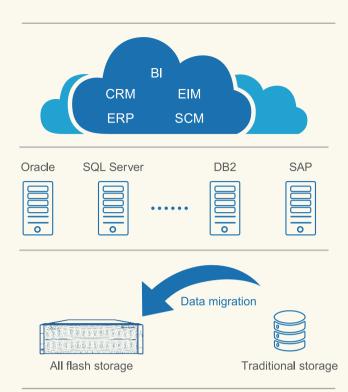
The Decision to Go With Huawei in 2016

Storage is harder to change out than the other parts of the IT infrastructure. The lifecycle management and TCO considerations in its storage layout were the top concern for TI.

At the beginning of 2016, the 66 sets of storage equipment distributed at the seven data centers in the TI network were nearing the end of their lifecycle. After vetting many vendors, TI was most impressed with the capabilities of Huawei high-end storage.

Full Continuity Assurance in Migration Event Makes for Pain-Free Evolution

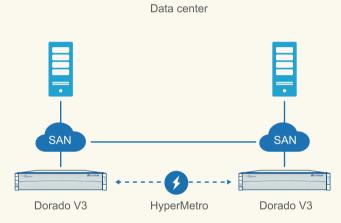
Huawei has accumulated extensive experience in consolidating and migrating storage layouts over the last decade for customers the world over. The new generation of Huawei all-flash storage devices can virtualize and take over heterogeneous equipment. Huawei Data Migration Service executed a smooth move for all services on the traditional storage systems to the accelerated all-flash layout.



Huawei's All Flash Ensures Services Remain Online

High availability of mission-critical services is a basic requirement for telecom operators. TI was using aging high-end storage equipment to carry these services.

The Dorado sets itself apart from other all-flash offerings with its gateway-free active-active design. Even when active-active redundancies are enabled, the system can still maintain low latency. Performance and reliability requirements are fully satisfied.



Gateway-free all flash active-active solution

Double the Performance in Service Processing Capabilities

TI conducted stress tests on the Huawei OceanStor Dorado V3 with testing parameters that reflected the actual service loads of its live network. The results showed the Huawei solution is able to improve performance by 54.7%, enough to completely satisfy the requirements from CRM, operational analytics, billing, and other compute-intensive services. Dorado V3 delivers exceptional stability and comes equipped with inline deduplication and compression. The compact and energy efficient device helped TI cut the footprint in the equipment room by 83.6%, consume 92.8% less power in its storage network, and lower TCO by a projected 64.3% over the next three years while improving ROI by 55.5%. All this was made possible because only 23 sets of OceanStor Dorado V3 all-flash arrays were needed to replace the 66 sets of aging equipment.

Huawei Storage Accelerates IT Transformations

Deploying the Huawei Dorado V3 to carry the mission critical services at TI and consolidating the previous layout delivered the following benefits:

- ▲ 100% improvement in performance; double the service efficiency.
- ▲ 50% reduction in TCO; 3:1 data reduction guarantee; end-to-end savings.
- ▲ 24/7 service continuity; lower latency and equipment costs with the only gateway-free active-active all-flash array in the industry.