PURESTORAGE®

Roma Metropolitane is an engineering company that manages the construction, expansion and modernization of the subway lines of Rome on behalf of the local administration. After migrating all their services on a Pure Storage FlashArray™, Roma Metropolitane can count on a computing speed up to 10x faster than before, as well as quicker and safer back-ups. This allows the company to provide its services in a much more efficient and punctual fashion.

BUSINESS TRANSFORMATION

The virtualization of services on all-flash memory has provided Roma Metropolitane the ability to simplify overall business and application management, and reduce overall operating costs.

GEO

EMEA, Italy

INDUSTRY

Transportation — Civil engineering, infrastructures

"Latency and performance of the all-flash Pure Storage solution cannot be compared to anything we had in the past."

Andrea Spaziani,
IT, Facility and Procurement Manager

PURE STORAGE KEEPS ROMA METROPOLITANE ON THE RIGHT TRACK

Planning infrastructures and public transportation systems require cutting-edge software and access to extremely complex test environments. It requires remarkable processing power, and puts terminals and servers under significant stress. Roma Metropolitane discovered that Pure Storage can solve these problems and make work more pleasant and secure.

Roma Metropolitane manages the construction, expansion, lengthening and modernization of the subway lines of Rome on behalf of the local administration. It also takes care of a number of additional services connected with the city's public transportation infrastructure. Roma Metropolitane's engineers and architects manage one of the largest public work contracts in Italy. Thanks to Pure Storage they can do it effectively and efficiently, guaranteeing quality results and punctual delivery times.

VIRTUALIZATION ON ALL-FLASH STORAGE ENSURES OUTSTANDING PERFORMANCE

Andrea Spaziani is IT, Facility and Procurement Manager for Roma Metropolitane. He understands very well the nature of the company and its priorities. "Being an engineering company, our only work tool is the computer," said Spaziani. "This makes storage performance a central factor in the productive process of design and in documents management;" hence the need for cutting-edge storage solutions. This need became even more pressing when the company decided to dematerialize its systems and desktop stations.

The infrastructure used by Roma Metropolitane was in fact unable to sustain the transition to a full virtual environment. An alternative, more capable solution was needed. Roma Metropolitane chose to bet on flash technology, since it could offer excellent performances and reduced costs. The challenge was met by a Pure Storage FlashArray. "Pure Storage general performance results cannot be compared to those of any previous solutions we had," said Spaziani. "Latency is always below a millisecond, IOPS and bandwidth are vastly superior to our actual needs."

Pure Storage was identified as a likely winner from the get-go due to its good reputation, and its guarantee of quality, ease of use, and excellent performance — as testified by many satisfied customers. Pure Storage exceeded these expectations by including technological updates in its maintenance service, and by providing solutions that conform well to the needs of any customer, in terms of price and size — a trait that Roma Metropolitane particularly enjoyed as a relatively small but very demanding business in terms of performance results.

COMPANY:

Roma Metropolitane
www.romametropolitane.it

USE CASE:

- VDI – VMware® Horizon® View
- Database – Microsoft® SQL Server
- VSI – VMware® vSphere®

CHALLENGES:

- Support the virtualization of servers and desktop stations.
- Reduce backup windows, minimizing the risk of downtime and data loss.
- Reduce energy consumption and space needs.

IT TRANSFORMATION:

- Accelerated data processing by 3x.
- Achieved up to 3x faster software performance.
- Reduced the duration of service interruptions by 66% due to updates.

"In half a day we arranged the environment and started to move the workload."

Andrea Spaziani,
IT, Facility and Procurement Manager

CONSOLIDATING MULTIPLE WORKLOADS ON FLASH

These solutions, together with the results of load tests, easily convinced the management of Roma Metropolitane. The company promptly received its FlashArray and could begin to take advantage of it in a matter of hours. "In half a day we arranged the environment and started to move the workload," Spaziani confirmed. At present, the server infrastructure is entirely virtualized; even the Raw Device Mappings have been removed from Microsoft Exchange and Microsoft SQL Server. All services — from SAP to Active Directory, from Splunk to Nagios —now run flawlessly on Pure Storage FlashArray with VMware vSphere. The company is currently finalizing the virtualization of fifty workstations with VMware Horizon, including the three CAD workstations using nVidia GRID graphical cards.

The actual impact of Pure Storage on Roma Metropolitane can be measured. Data processing is three times faster than before. Data deduplication, which takes place in real time, has reached a 4:1 rate for the production environment and a 6:1 rate for the test environment. The time needed for the creation of some technical designs went from 25 minutes to just 2 minutes, while the time needed to create managerial reports halved.

FASTER BACKUPS ENSURE BUSINESS CONTINUITY

These unprecedented performance results aren't the only improvements brought about by the FlashArray. Backup windows have become considerably shorter, which reduced the risk of data loss without any negative impact on production performances. Performance of the Simpana inline compression and deduplication database now allows the use of cloud object storage to vault backups. System updates are now much faster, too: the duration of service interruptions has been reduced by 66% due to updates.

There are economic benefits, as well: Spaziani foresees a 6-year amortization for the FlashArray, which is twice the lifespan of the previous infrastructure. Sizeable savings can also be seen in energy consumption and space needs.

Other remarkable features of the Pure Storage FlashArray — the most appreciated ones by Roma Metropolitane's technicians, without a doubt — are the ease of use and the high degree of integration with other systems like VMware vSphere and CommVault IntelliSnap. These two characteristics made the migration to the new flash infrastructure quick and painless.

SIMPLIFIED MANAGEMENT LIBERATES IT STAFF

Adopting a Pure Storage flash solution ultimately made Roma Metropolitane more effective and efficient. The company can deliver top quality work, easily comply with the assigned deadlines, and reduce costs to the minimum. In addition, the company's employees can now enjoy a more pleasant work experience.

Performance is no longer a concern for technicians. They can now focus on high-value, vastly more stimulating tasks such as data protection and management of the virtual environment. It is finally possible to test developments and new apps without worrying about their impact on the storage infrastructure.

Architects and engineers find their work experience to be much more rewarding than before. Their desktop stations run up to 10x faster than their old PCs, even while running graphic software like CAD or 3D Studio.

PURESTORAGE®

info@purestorage.com
www.purestorage.com/customers