



Success Story

UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II

Overland Storage Reo 4000 disk-based back-up and recovery appliance and Neo 2000 library ensure data back up for leading Italian university

Challenges:

- The IT infrastructure must serve over 130,000 users 24/7 despite it is unmanned daily between 8:00 pm and 7:00 am
- The back up process was a major burden for its two operators taking five days to complete each time
- The two IT infrastructures needed to merge: at the remote branch data was backed up only once a month
- Following this consolidation the team needed a back up solution that would work across several OSs and provided an open approach to data protection

Solution:

1 x Neo 2000, 1 x Reo 4000

Benefits:

- D2D2T strategy reduced the back up process from five to two days
- Disk back up at the remote site and tape back up in the main campus
- Flexible, reliable, cost-effective and scalable
- Avoided increase in head count - the entire back up process is managed from a central location
- All 5TB of data are now protected against downtime and/or loss information can now easily be retrieved in less than 30 minutes
- A second Reo appliance soon to be deployed will provide bi-directional back up

Reseller:

Datamatic Sistemi e Servizi S.p.A www.datamatic.it

The Università degli studi di Napoli Federico II, named after the Prussian king Frederick II, was founded in 1224 and has since been one of the largest and most prestigious universities in Italy.

Today the institution employs a staff of 8,000 supporting over 130,000 students across 13 faculties, 87 departments, 15 research centres and six museums dedicated to natural sciences, entomology, veterinary anatomy, physics, zootechnology, and farming.

Boasting several centres of excellence, including one for Technology Innovation in Surgery and one for Civil Engineering, the University now also counts one of its professors, Luigi Nicolais, among the Italian government ministers.

The Challenge

With thousands of students and staff, the University of Naples generates very large volumes of data daily and this must be available 24/7; according to the local legislation, the university could be sued by its students should the systems go down making data inaccessible. To add to this pressure, the IT infrastructure is unmanned every day between the hours of 8:00 pm and 7:00 am.

'Choosing Overland was not difficult. With the Overland Neo and Reo the current operators can easily manage the entire system from a central location.'

Giovanni Barone Phd, Head of IT,
Naples University

The university used to rely on a number of Operating Systems including AIX, Linux, and Windows. However the cost related to hiring individual specialists lead the team to consolidate to fewer platforms. The back up process was another burden for its two operators; it was regularly carried out but because the five terabytes of data residing in

the system was moved directly to tape the entire procedure took five days.

The need to merge the IT infrastructures of the main university centre and its Montesantangelo remote branch was the last straw: the latter at the time had a purely nominal back up process in place which was carried out at irregular intervals approximately once a month. In early 2006, after two years spent consolidating the two infrastructures, the University of Naples' technical team could finally manage the data from a central location.

Depending on how mission-critical the data was it resided on the SAN (80%), NAS (18%), or DAS (2%) devices. In addition, a number of Operating Systems were deployed and any new solution should be compatible with all of them.

The Solution

The IT team, lead by Giovanni Barone PhD set out to select a new solution that would allow them to back up to disk and then to tape (D2D2T). In particular, the remote site would back up to disk and then to the tape library located in the main campus. Thus only one tape library is needed to back up to tape both the remote and local data.

Being a public institute the University of Naples could not approach vendors directly but had to go out to tender. Their selection criteria were cost-effectiveness, the range of features, such as modularity, high scalability, and support for Fibre Channel, iSCSI and Ethernet, and of course reliability. The university needed an open system.

'In order to speed up the application process and eliminate the traditional queues of students in the registration office, for quite a while now the entire application process has been taking place online,' said Giovanni Barone, Information Systems technical director at the university. 'This has naturally added further demands on the storage infrastructure and hence increased the performance we required.'



Because of such a strict brief only two suppliers were put forward: Overland and HP. Thanks to Overland's local distributor Datamatic, one of the largest players in the Italian IT channel, with nationwide coverage through 12 offices and a network of resellers, Overland's offering had the winning edge: 'Choosing Overland was not difficult. Within our budget the Overland offer was much more compelling because of the extra features Datamatic was including,' continued Mr. Barone. 'I could not afford to take two more back up administrators to run the remote site and the Overland Neo and Reo allow the current operators to easily manage the entire system from a central location.'

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Naples University

The University of Naples therefore installed a Reo 4000 disk-based back up and recovery appliance in the Montesantangelo remote branch and a Neo 2000 tape library in the central campus to back up the 5 terabytes of data including the web servers, student applications and email.

The Benefits

All the data is now protected in case of downtime and/or loss; a staggering difference when compared to the previous set up whereby any loss of data in the remote branch would have been final. Barone remarked 'If our Montesantangelo remote branch experiences a loss of data they can now easily and quickly retrieve the copy at our central

About Overland Storage

Now in its 25th year, Overland Storage is a market leader and innovative provider of simply protected storage solutions – smart data protection appliances and software modules designed to work together, affordably, to ensure that information is automatically safe, readily available and always there. Overland's award-winning data protection solutions include the ULTIMUS SERIES™ of protected primary storage appliances; the REO SERIES™ of disk-based backup and recovery appliances; and the NEO SERIES® of tape libraries. Overland sells its products through leading OEMs, commercial distributors, storage integrators and value-added resellers. For more information, visit Overland's web site at www.overlandstorage.com.

campus, and next year we will add a second Reo appliance to deploy a bi-directional back up strategy that allows us to store a copy of the main office data in our remote branch for extra protection.' Through the Overland solutions, today the university of Naples can retrieve data in less than 30 minutes thanks to a sound back-up strategy.

'The Overland appliances are currently our main back up strategy although they are working in conjunction with a StorageTek library which we will soon remove because it has reached the top of its scalability and adding a single drive would cost us the same as a new Overland library,' continues Barone. 'The unique combination of features, reliability and cost has really made Overland the ideal solution for the university. The protocol versatility of the Neo tape library and the scalability of the Reo disk appliance are just two of the reasons why we have chosen Overland.'

The D2D set up immediately reduced the back up process from five to two days, a significant drop of 60 percent. The migration of data to tape, which still takes five days, is now done in the background without the concern of glitches happening to the only copy of the data along the way.

'The Overland solutions have been providing us with such a smooth performance that we can't imagine how we could have carried on without them today,' said Barone. 'To be able to ensure service levels and to improve performance despite having an unattended remote system has allowed us to focus resources on other requirements.'

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