

“Our backup time went from a best case scenario of 3 1/2 days to having 99% of a full backup done in 2 to 3 hours!”

Adolfo Segura
Manager of Infrastructure



Unified Port District of San Diego

Situation

The Unified Port District of San Diego currently employs 525 permanent employees and is spread across 10 waterfront operational sites. A data backup solution that can support their critical, rapidly expanding data is essential to the Port's operation. Unfortunately, the IT department faced a growing problem due to the failure of their backup software. Backups were taking over three days to complete and more often than not, would not complete at all. The port constantly encountered errors during their daily backups and often had problems restoring data. Employees spent nights and weekends babysitting their backup solution and dreaded the next error message. It was clearly time for a new solution.

ENVIRONMENT

The Port's immense IT infrastructure is extremely diverse and needed a single, reliable backup solution that would support their entire environment. Manager of Infrastructure for the Port, Adolfo Segura, describes their environment as a "Cisco-based data voice video infrastructure with a mix of Microsoft Windows, Linux, Solaris and NetWare platforms, containing a GroupWise email system. We support the Harbor Police Department's 800-megahertz radio system and have over 600 desktops and notebooks throughout the agency. We are running a fairly extensive Oracle 10g environment and have a mixture of physical and virtual VMware servers, with the goal of becoming more virtual in the future." The Port's environment contains two Data Domain SANs and three Quantum tape libraries, one in the administrative building and two at remote locations. The entire IT infrastructure operates out of thirteen sites: one main administrative data center, nine remote sites with multiple point-to-point connections, and three other sites with servers and data storage capabilities.

CHALLENGE

“SEP is well-known already. Just a few days ago, we spoke to one of our possible service providers about the move from Netware to Linux, when we mentioned SEP, the gentleman said ‘Oh great, it will be seamless. It will be done in no time with SEP.’”

Jasmin Mededovic
Network System Analyst

Jasmin Mededovic, Network System Analyst for the Port, was becoming more and more frustrated with their previous backup software, which they had been using unsuccessfully for quite some time. “The software performance was subpar. Backups would exceed our backup window or never finish at all. We could not back up more than two or three enterprise servers and were never able to fully back up GroupWise. We had several problems restoring some of the backup jobs, and more often than not, we could not find the exact data we were looking for. Our previous backup software needed nonstop babysitting. In fact, maintenance of the previous product was becoming a full-time job for our staff because not a single day went by that I or someone else didn’t have to do something with the software.” The Port was wasting valuable time and resources on a failing backup software that could not meet their diverse data requirements. The IT department went in search of a reliable, high-performing enterprise backup and disaster recovery solution.

SOLUTION

“One of the challenges to finding a solution is that we run NetWare as our native operating system, and we are migrating to NetWare on SUSE Linux by the end of this year. We needed to find a backup solution that would allow for the maintenance of the existing environment, help us create an easy transition to Linux and back up our GroupWise email system – which we are operationally required to be able to back up and restore in a timely manner – all at the same time,” Segura recalled. The Port’s IT department sent out an RFP and looked at several backup solutions, however, the representatives “came unprepared for their product presentations and did not take us seriously,” Mededovic explained. “SEP, on the other hand, starting with the initial presentation, was seamless. It was clear from the beginning of the proof of concept that SEP would be easy to install and maintain. SEP installed simply and easily and we were able to perform test backups in no time. We could even assess the advantages of using their Multi-Streaming Technology to simultaneously stream many jobs to our backup devices. The fact that SEP works natively with Linux, as we will be moving to SUSE Linux very soon, will be a big plus for our environment.”





RESULTS

“SEP made the installation and migration of data extremely easy. The support staff I work with is outstanding. Our primary contact is one of the best I have ever worked with. Support has always been readily available, responsive, professional and very knowledgeable. I wish other companies had people like this as well because they are just great to work with.”

Jasmin Mededovic
Network System Analyst

SUPPORT & INSTALLATION

The Port performs incremental backups to disk during the week and full backups to tape on the weekends. Tapes are stored for safety off-site. “With our previous backup software, it would take over three days to perform a full backup, if it ever finished at all, without errors. I had to manually break up the jobs because they would not be finished after the regularly scheduled time and could not be performed during the business day. So it took forever or it never completed at all,” explained Mededovic.

With SEP, “our backup time went from a best case scenario of three and a half days to having 99% of a full backup done in two to three hours. We have one server on a slow data link and this extended the full backup to about five or six hours total. However, that slow server will be eliminated during our migration to a faster environment over the next year, and this will mean we will be able to perform a full system backup in a two to three hour timeframe.” That is a 97% decrease in full data backup time!

Unlike with the previous product, “The Solaris and Oracle backups are just flying through. I have a guy watching over the Oracle backups, which went from three hours and 45 minutes to just 42 minutes with SEP, but I don’t think he is doing very much. It is set-and-forget technology. I am seeing very, very good performance from SEP,” Mededovic reports. Mededovic also told the SEP team “the agentless architecture behind SEP is a great benefit. SEP was set up a while ago and is now running seamlessly, but if I do have to stop a job for any reason, there is a great feature that allows me to stop a specific job without stopping the entire backup group of jobs that are scheduled simultaneously.” With SEP, the Port is able to back up over 4 TB of data running on NetWare, Windows, GroupWise, Solaris, Oracle and VMware in just a few hours. The IT department can easily use SEP to back up their data to the Data Domain SAN disks, migrate the data to their tape libraries and move the tapes off-site to one of their storage facilities.

Mededovic described his experience with SEP as extremely positive, “SEP made the installation and migration of data extremely easy. The support staff I work with is outstanding. Our primary contact is one of the best I have ever worked with. Support has always been readily available, responsive, professional and very knowledgeable. I wish other companies had people like this as well because they are just great to work with.” Segura also stated that SEP was “very responsive and prompt whenever we submitted a request, whether it be for support, sales or general information.”

SEP Software is the premier technology leader providing high performance backup and disaster recovery solutions for professional IT infrastructures of all sizes. SEP delivers seamless solutions with one central interface to easily manage backups for heterogeneous environments.

SEP's software ensures that data security for both virtual and physical environments can be easily and cost-effectively achieved. SEP is the ultimate expression of German engineering and attention to detail. Design and programming originate from SEP offices in Weyarn, near Munich, Germany, where overall performance and reliability are of the utmost concern.

FUTURE PLANS

SEP will be an integral part of the Port's transition to SUSE Linux and further VMware integration. The current environment is about 80% physical and 20% virtual but they plan on migrating more and more to VMware. Luckily, Mededovic explains, "SEP is already very well known. Just a few days ago we spoke to one of our service providers about our move from Netware to Linux, and when we mentioned SEP, the gentleman said, 'Oh, great, it will be seamless. Your migration will be done in no time if you're already using SEP.'"

ABOUT UNIFIED PORT DISTRICT OF SAN DIEGO

The Unified Port District of San Diego is a special district created by the California State Legislature in 1962, consisting of five member-cities: Coronado, National City, Imperial Beach, Chula Vista and San Diego. Its main duty is to manage the San Diego Bay and the surrounding waterfront property. The Port oversees two maritime cargo terminals, a cruise ship terminal, 17 public parks, multiple wildlife reserves and environmental initiatives, the Harbor Police department, security support for the San Diego International Airport and the leases of over 600 tenant businesses operating along the waterfront, which range from small, individually owned businesses to multi-national corporations like the Hyatt Hotel. As a trustee of the waterfront property, the Port's duties include the active management of the physical land through water quality, community parks, infrastructure improvements and other various environmental services; maritime services; and public safety and security.

ABOUT SEP

SEP Software has been delivering the widest range of backup and disaster recovery products for enterprise-level customers since 1996. With thousands of installations worldwide, SEP has developed the fastest and most reliable data backup solution available today. Its flagship product is ideal for businesses of all sizes and has proven its value to thousands of organizations across the globe. SEP has delivered unsurpassed performance to numerous industries including retail, education, health care and governments worldwide. Thousands of customers spanning six continents rely on SEP to attain their data protection strategies on a daily basis.