Pgs atlantic power

Company: EnterasysCustomer: PGS Atlantic PowerSubmitted by: MCC InternationalDate: June 2000The challenge was to consolidate PGS Atlantic Power's Local Area Network in a single building, with minimal disruption to the company's 24-hour operations, while maintaining the high availability and quality of service expected by the network's users and external clients. The company relies on its network to manage essential, business-critical information, from reports on oil production and quality to maintenance and safety. Much of this information is distributed to clients who are some of the biggest names in the oil and gas industry." Downtime is not an option for us," says PGS Atlantic Power's Senior Network Advisor, Adrian Dyer. " We have a duty to our clients, to our users and to our staff working off-shore to maintain systems availability round the clock. Our server infrastructure was already good and stable, so our major challenge in migrating to a new network was to maintain the status quo and meet our users' expectations that they would continue to have what they'd always had – network access – without losing availability during the project or in the future.

" Together with Enterasys (formerly Cabletron Systems) and Value Added Reseller CSF, PGS Atlantic Power achieved its goal over a carefully planned roll out period. With the benefits of improved fault tolerance and manageability already being realised, Dyer and his department are looking forward to further enhancing services for the company's users and customers through tighter network integration and using the infrastructure for voice and video traffic.

The Customer

Based in Aberdeen, Scotland, PGS Atlantic Power provides specialist services to the oil and gas industry. The improvement of asset performance is a common goal for all its customers. To that end, the company aims to be the leading supplier of project management, operations management, consultancy and process facility management services to the industry.

It also has a legal obligation to provide essential industry information to the Department of Trade and Industry and other parties. Over 250 staff use the network for file and print services. There are 15 super users who access CAD applications over the network, and a number of off-shore personnel who access corporate accounting, materials management and stock control applications. Ultimately, the LAN will integrate with the company's Wide Area Network, providing enhanced communications links with its offices in Houston, Oslo and Perth, Australia. The LegacyUntil 1999, PGS Atlantic Power's Aberdeen office was spread across three separate buildings, linked by a network of 10mb shared hubs.

" It was starting to creak at the seams due to the increase in the number of staff and a growing number of external sites," says Dyer." We knew we would have to upgrade and invest in a new switch-based LAN infrastructure that would provide us with the necessary speed, scalability and capacity for the future, but we decided to wait until our new building was ready in October 1999." As a 24-hour operation with responsibilities to Government agencies and major external clients, PGS Atlantic Power can't afford the prospect of losing business or failing to provide critical information through network failure. It also has a duty to its staff, working in potentially

dangerous remote locations, to maintain constant communications and if necessary, man an emergency response centre at short notice." Even if there's a catastrophic failure, we need to be certain that the network will still function," says Dyer.

The Plan
The network project spanned 14 months from initial design to completion in October 1999.

With cost and fault tolerance as its two primary considerations, the network design team spent a long time evaluating possible solutions, considering how they would implement the network, the services they wanted to deliver and the products they would use. There was no major dialogue with the user community, whose requirements remained exacting and constant: to continue to have fast access to their critical applications. In the end, implementation would come down to four consecutive week-ends, when the infrastructure would have to be configured and the users migrated seamlessly across to the LAN in their new premises.

Why Enterasys?
Initially, PGS Atlantic Power considered solutions from four vendors: Lucent, Cisco, Nortel and Enterasys. The decision to implement a solution based on Enterasys's SmartSwitch Router (SSR) was based largely on its appropriate cost, performance and the fault tolerance of the products – essential given the company's duty to provide its clients with constant information availability.

" A lot of it also came down to the attitude of the vendor," says Dyer. " Some of the contenders were complacent, vague or just too expensive. Enterasys's people clearly believed in the product they were selling. They were enthusiastic and showed real understanding of our business." Dyer explains that quality of service was also a vital consideration.

As applications are added to the network in the future, the company can't afford to see any degradation in performance. Enterasys's future-proof Layer 4 switching architecture means it can be confident that it will be able to exploit the full capabilities of switch facilities as necessary." To begin with, we're basically running a vanilla network with switched 10/100mb links to the desktop," adds Dyer. " But our long term ambition is to take full advantage of Enterasys's policy management facilities and we expect this to enable us to deliver improved services to our customers through the greater manageability of the network." We're already doing some work with virtual LANs and further down the line we expect to segregate the network into a more logical design.

At the moment, our external sites access the network via a legacy router, but we will eventually integrate the SmartSwitch Router at WAN level, and that should bring the benefits of reduced call charges through Voice Over IP, and the potential implementation of video links, of which the SSR is more than capable."

The Installation

Although the project had been evolving for 14 months, PGS Atlantic Power didn't start to implement the new infrastructure until October 1999. The

challenge was to stage the installation over four successive weekends without disrupting user access to their applications at any time. Dyer says it required tight management, because so much was happening at the same time. " First, we had to create a mesh environment for the WAN so users could still access their servers.

Then, in the week leading up to the first week-end, we had CSF installing the infrastructure, engineers terminating lines in the computing room and patching them to the desktops, and the new telephone systems being commissioned and configured!" According to Dyer, there were some minor teething problems but as far as the users themselves were concerned, the transition happened seamlessly. " The CAD users tend to throw many megabits of data around, and they said it was running well so that suggested we'd achieved our goal," he says.