

Benefit Matrix- Revitalizing Performance Parameters

The benefit spectrum of going in for such an end-to-end solution has been varied for both the terminals. HP's solution backed by a highly competent team of professionals has ensured the seamless working of operations at both the terminals. Testifying to this is the fact that there has been a definite increase in more shipping lines preferring to call at NSICT due to its benchmarked performance standards and better customer-focus. In 2001-2002, the terminal handled 943930 TEUs and 936 vessels.

Adds Mr. Rengarajan, "This full time management of the IT network at both the terminals has helped free up our internal resources to take care of our operational needs in a more streamlined manner. There is certainly more efficiency in our operations and availability of information in real time. The use of IT has been more than a facilitator in our business and has undoubtedly brought about a paradigm shift in the shipping industry. As a clear market leader, we had to take business decisions that would impact the long time long-term operations of our corporation and HP has been a key enabler and partner at all stages."



Partnering P&O Ports for better port management



P&O Ports is the leading global port operator, with 21 container terminals in 19 countries and operations in of 84 ports. In 2000, P&O Ports worldwide operations handled a throughput of 8.3 million TEUs (20-foot equivalent container units), representing 4% of world trade. With more than 12,000 employees, P&O Ports is rapidly expanding its presence in all continents. Throughout the world, the company's name is synonymous with quality and consistency of management and client service, and builds on the 160-year reputation for excellence in maritime services of the P&O Group. The company's expansion has been primarily driven by a combination of acquisition and investment. P&O Groups' operations extend to container terminal, bulk and general cargo handling services and management, electronic port management systems and other support services. P&O recognizes the increasing role that information technology plays in the industry and has invested considerable resources to developing and improving its technological systems.

As part of the government's privatization initiatives in Indian ports, P&O Ports was awarded a 30-year license to build operate and manage India's first private container terminal, Nhava-Sheva International Container Terminal (NSCIT). In June 2000, P&O Ports was selected as a preferred tenderer for the management of operations and redevelopment of Chennai Container Terminal (CCT), the largest container terminal in the Indian coast. It is important to understand the complexity of activities integrative of the shipping industry and the concomitant port management that comes to the fore.

A Case Study



Industry Dynamics - Complex and Varied

The shipping industry is a highly capital intensive sector, and a chunk of its revenues are generated from the transportation / movement of cargo. Global economic conditions, port facilities, port management, etc. are some of the key elemental mix that drives this dynamic industry. Strictly speaking, an international port's major areas of activity are containerization, break/bulk handling, oil and gas, etc. Moreover, there also several support services / activities that complement these operations, viz. distribution, materials handling, warehousing, towage, vessel traffic management, etc. Over the years, the efficiency metrics and performance parameters of the ports have dramatically shifted from mere asset utilization to optimal operations management (with reference to turnaround times and specialized value added services). And, needless to say, information technology has primarily been influential in realizing better port capacities, better data and information management and thereby maximizing gains from business operations.

Says, Mr. Rengarajan, IT Manager, South East Asia & Middle East, P&O Ports Pvt. Ltd., "Our business is extremely competitive and in the last few years it has been seamless port management and optimal resource and asset utilization that have been crucial competitive determinants for our service mix. Clearly, information technology has also played a crucial role in energizing pivotal port operations. Today, it's not just about servicing the needs of the customer, but it is about creating value for the customer at every stage of his business transaction with the terminal."



Requirement Mapping Addressing Critical Business Variables

The dynamics of this industry are complex and is inextricably linked to how best vessels can be serviced on time and ensure turnaround of the vessels at the designated times. The traffic and volume of business is such that manual processes to manage these operations efficiently would have meant chaotic scenarios. In other words, loss of accuracy, duplication and redundancy of certain key port activities, erroneous billings for customers and thereby the loss of business goodwill. Considering the range and volume of operations at the terminal, it was imperative for P&O to zero in on an IT solution that was reliable and would stimulate process and operational efficiencies.

Explains Mr. Rengarajan, "The management was keen to ensure a committed 24/7 business-operating environment. We were seeking a solution that would facilitate the smooth and seamless running of time and mission critical business applications. This was based on our business premise that we have to service all the critical business needs of the trading community by providing better productivity and efficient information dissemination. In effect, the efficiencies of our business processes needed to be improved for us to elevate our level of services which meant timely turnaround and speedy delivery of services. The solution deployment also had to be in line with what we had planned for our business operations with respect to scale and operations. We zeroed in on Compaq to provide the solution. The study and requisite research and the evaluation to home in on HP began in January 2000 with the execution of the order happening in August 2000 at the Chennai facility. The same DRM solution has been replicated at the NSICT terminal. Incidentally, Chennai is the first P&O terminal in the world to install this solution."

What also attracted P&O to HP was that it was the only vendor capable of providing an end-to-end solution for the project. This entailed a very integrated level of operations, which encompassed supplying the box, configuring the systems, installing the network components and putting the communications system in place. HP engineers have also helped in installing the Cisco-IP telephony system in India.



HP's Relationship Program-Enabling and Proactive

The essence of a relationship program between two business entities is the level of operational synergies that both can achieve. Clearly HP as a service provider has gone beyond the conventional expectations set for the customer.

Affirms Mr. Rengarajan, "As a service provider, HP has lived up to most of our service level expectations. Their pre-sales support is very good. Sharing of information with respect to product and technology upgrades is timely. The technical skills with respect to the solution are of a high order. Their support right from the implementation to the post implementation stages has

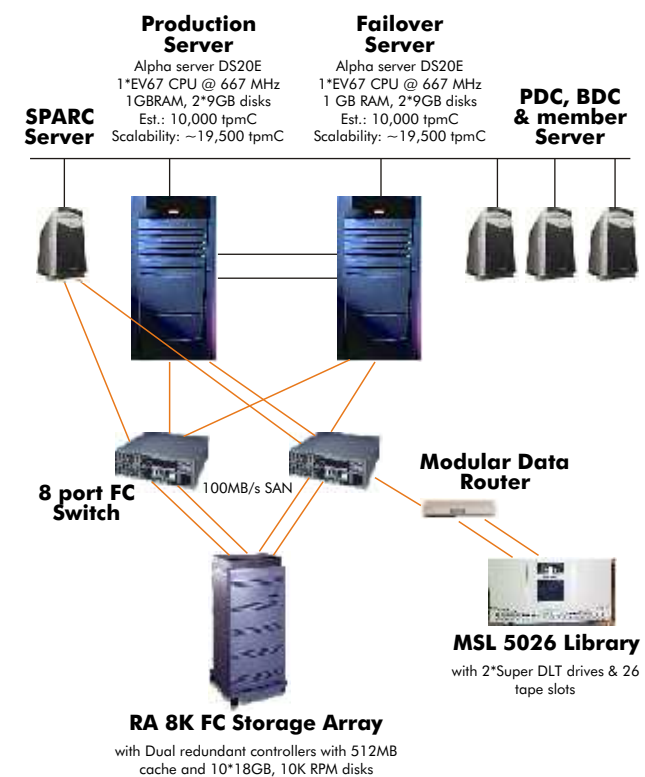
also been upto the mark. HP's site representatives give us the weekly status reports, which details all the activities by the technical engineers and all the necessary feedback that we ever need from their project co-ordinators. They are pro-active and ensure that our operations are patched thereby negating any attacks at vulnerable points and making the networks safe."

Highlights of the Solution

- Alpha server DS20E & RA8000 production cluster running Tru64 Unix and TruCluster s/w using memory channel connectivity.

- No Single Point of Failure (NSPbF) solution for high availability.
- Alpha server DS20E server & RA8000 at disaster recovery site.
- SANworks Data Replication Manager (DRM) based disaster recovery solution using single mode fibre links between two sites 2km apart.
- RAID Array 8000 has been configured with redundant & hot-pluggable RAID controllers and power supplies. Even the AC input and cooling are redundant.
- MSL Library with hot-pluggable Super DLT drives directly connected to FC SAN thru a Modular Data Router (MDR).
- One of the Alpha server's would be configured as the Legato NetWorker Master, all the other servers would have the client agents.
- The EBS solution with Legato NetWorker will enable automated, scheduled and policy based backups. Oracle agents have also been given for hot database backup.

P&O Ports: Production Site



P&O Ports: Disaster Recovery Site

