

BROKERAGE TRADES UP TO ROBUST SERVER PLATFORM

Dell PowerEdge servers with virtualization help reduce datacenter footprint by over 35 percent at Pune e Stock Broking



Pune e Stock Broking Pvt. Ltd. (PeSB) is a brokerage based in Pune, India, serving its customers from the state of Maharashtra. Established by experienced financial brokers and top experts, the company draws on nearly 20 years of collective expertise in offering brokerage services in India. The company has 20 employees in Pune and six employees outside of Pune, and focuses on trading in Indian stocks, commodities and all aligned services in the primary and secondary markets.

SOLUTIONS

- CONSOLIDATION
- VIRTUALIZATION



CUSTOMER PROFILE

COMPANY: Pune e Stock Broking Pvt. Ltd.

LOCATION: India

INDUSTRY: Banking & Finance

FOUNDED: 2007

EMPLOYEES: 20

WEBSITE: www.pesb.co.in

CHALLENGE

An emerging online brokerage, Pune e Stock Broking Pvt. Ltd (PeSB) needed a highly available and responsive trading platform to support the millions of dollars of online trading conducted by the company. PeSB wanted to build a robust platform that would rank as one of the best in India, while remaining cost-effective and highly scalable to support future expansion plans.

SOLUTION

To power its online trading, brokerage and back office accounting platform, PeSB deployed Dell™ PowerEdge™ servers with virtualization to host a variety of financial industry applications.

BENEFITS

Get IT Faster

- Dell Global Infrastructure Consulting Services provided quick and reliable support

Run IT Better

- Dell solution helped reduce data center footprint and rack mount expenditure by 35 percent
- Dell servers with virtualization helped reduce number of servers required and lowered energy consumption by 30 percent

Grow IT Smarter

- Virtualized solution simplified server management and redundancy
- Dell Global Infrastructure Consulting Services helped ensure successful server deployment

The Dell logo, consisting of the word 'DELL' in a bold, sans-serif font, is enclosed within a circular border that has a slight 3D effect.



“DELL OFFERED US THE BEST OVERALL VALUE, AND A SOLUTION THAT REDUCED OUR SERVER FOOTPRINT BY OVER 35 PERCENT.”

Samir Gandhi, promoter, Pune e Stock Broking Pvt. Ltd.

HOW IT WORKS

HARDWARE

- Dell™ PowerEdge™ 2950 servers with Intel® Xeon® processors
- Dell/EMC® CX3-10 SAN array
- Dell PowerVault™ TL 2000 tape backup
- Dell OptiPlex™ FX160 thin client

SOFTWARE

- VMware® ESX Server 3.5
- VMware VirtualCenter
- Symantec™ Backup Exec™
- Dell OpenManage

SERVICES

- Dell Global Infrastructure Consulting Services

With the objective of making a significant impact on India's burgeoning stock market, the directors of Pune e Stock Broking Pvt. Ltd. set out to build a robust, world-class IT infrastructure. Samir Gandhi, promoter, PeSB explains, "Our aim is to be a financial super house and to become one, we realized we needed a robust trading infrastructure that was world class." Gandhi was previously responsible for building the hardware and software infrastructure at Pune Stock Exchange Securities. "We wanted something small but scalable, which would deliver a level of performance that would be compared favorably to the largest broking houses," adds Gandhi.

DELL SOLUTION CHOSEN FOR HIGH VALUE AND PERFORMANCE

PeSB explored a number of options before selecting its final trading platform. Initial design plans called for servers to support the trading applications required to sustain current business and future expansion plans, and PeSB thought that standalone servers would offer the necessary throughput for the construction of a robust platform. "As a small brokerage, we were looking for a cost-

effective solution that was high on value and performance. Based on our requirements, we realized that a conventional setup of standalone servers would put a strain on our resources," says Gandhi. As a result, PeSB opted to utilize virtualization technology.

DELL GLOBAL INFRASTRUCTURE CONSULTING SERVICES CONTRIBUTES TO STRONG SUCCESS

The company engaged Dell Consultants in the assessment of sizing servers for virtualization, the deployment of VMware® ESX Server 3.5 and the evaluation of backup software, as well as storage requirements. "As we were building the entire infrastructure from scratch, it was essential to involve Dell from the beginning to ensure success," says Gandhi.

"Right from the start, we considered virtualizing our servers as a means to save on acquisition costs and data center space. We wanted a single vendor for the entire hardware infrastructure and this meant uninterruptible power systems (UPS) requirements were also handed over to Dell," remarks Gandhi.



“WITH FEWER SERVERS OPERATING AND DELL’S ENHANCED DESIGN FEATURES, WE HAVE BEEN ABLE TO PLAN FOR POWER REDUNDANCIES AND HAVE REALIZED A 30 PERCENT REDUCTION IN ENERGY CONSUMPTION.”

Samir Gandhi, promoter, Pune e Stock Broking Pvt. Ltd.

A critical component of the deployment plan was to ensure PeSB’s trading applications would work in a virtualized environment. The Dell team worked with PeSB and sought the cooperation of software partners to test and configure the applications for virtualization.

The final configuration included Dell™ PowerEdge™ 2950 servers with Intel® Xeon® processors running VMware ESX Server 3.5, PowerEdge 1950 with Intel Xeon processors running VMware VirtualCenter, and PowerEdge 1950 using Symantec™ Backup Exec™. In addition, PeSB purchased Dell/EMC CX3-10 SAN array, Dell PowerVault™ TL2000 tape backup, Dell OptiPlex™ FX160 thin clients and several UPS. Dell delivered an end-to-end solution that would serve at least 50 concurrent users connected to the National Stock Exchange.

As the company was managing time-sensitive deals on a day-to-day basis, PeSB

chose Dell GICS to help with installation and support. Gandhi says “One of the key reasons we selected Dell as our preferred vendor was that Dell had resident engineers in the city, ensuring immediate resolution of any problems and keeping our systems running efficiently.”

DELL SERVERS WITH VIRTUALIZATION HELP REDUCE DATA CENTER FOOTPRINT

Given the current size of the brokerage, PeSB was concerned over deploying multiple servers in a limited space. Opting for virtualization helped improve the company’s original plans. “Reducing the space required to host the servers is an advantage because it means we have room for expansion without the additional space costs or constraints. It is a strategic advantage in managing the operation and in planning for the future,” observes Gandhi.

“This solution allows us to scale using virtualization and benefit from clustering server technology so that if one server goes down, the load is automatically handled by the other servers,” notes Gandhi. “With Dell servers and virtualization we resolved the first of our challenges, which was to build server capacity while reducing cost. Dell offered us the best overall value, and a solution that reduced our server footprint by over 35 percent,” he continues.

DELL SERVERS HELP REDUCE ENERGY CONSUMPTION BY 30 PERCENT

PeSB determines its energy savings by calculating the difference of servers required with and without virtualization. Gandhi remarks, “With split second trades transacting every day, we cannot afford for our systems to suffer from any downtime. Indeed, with fewer servers operating

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and Dell's enhanced design features, we have been able to plan for power redundancies and have realized a 30 percent reduction in energy consumption. More importantly, there has been no trade off in terms of performance.”

SERVER MANAGEMENT MADE EASIER THROUGH VIRTUALIZATION

PeSB's IT team is small relative to its data center size, so it came as a bonus that virtualization and Dell's OpenManage tools helped simplify server administration. “Virtualization offers us built-in server redundancy, which means we're ensured seamless performance without additional intervention. With its automatic diagnostic

function, VMware ESX Server 3.5 can remedy problems quickly with no impact to our uptime. That means fewer IT support staff are required to manage the data center, and we can focus our efforts on our core business,” says Gandhi.

For more information on this case study or to read additional case studies, go to www.dell.com/casestudies and www.dell.com.in

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