



Angel Broking flies to new heights with VMware virtualization

INDUSTRY

Financial services

LOCATION

India

KEY CHALLENGES

- Provide continuous uptime and improved disaster recovery option
- Create flexible and agile IT infrastructure
- Improve infrastructure manageability
- Accelerate time to recover key systems in the event of a disaster
- Establish a platform to adopt a private cloud and virtualize desktops

SOLUTION

Using VMware vSphere, VMware vCenter Site Recovery Manager and VMware vCenter Operations Management Suite has enabled Angel Broking to establish a resilient, high-performing and cost-effective infrastructure to power its business-critical applications.

Angel Broking needed to deploy an infrastructure that could cost-effectively support growth in demand for business-critical applications. By deploying VMware vSphere, vCenter Site Recovery Manager and VMware vCenter Operations Management Suite, the brokerage has met demanding application availability requirements while optimizing its infrastructure and gaining the ability to recover quickly from a disaster.

Customer Profile

Founded in 1987 and headquartered in Mumbai, India, Angel Broking is a highly respected stockbroker and wealth manager. The firm is a member of the Bombay Stock Exchange, the National Stock Exchange, and India's leading two commodity exchanges. Angel Broking's services span equity trading, commodities, portfolio management, mutual funds, life insurance, initial public offerings, depository, and investment advisory. Together with Angel Commodities Broking and Angel Securities, Angel Broking is part of the Angel Group.

The Challenge

Angel Broking operates in an industry characterized by intense competition and paper-thin margins. This environment makes managing costs crucial in maintaining profitability. However, to service more than 700,000 clients from more than 100 branches and about 8,000 franchise outlets, Angel Broking must also ensure its technology infrastructure is up to the task of powering its business-critical systems and databases. These systems enable clients to access and trade stocks across a range of markets in a timely fashion, using devices such as PCs, tablets and smartphones.

"We have to support high data traffic volumes without compromising availability and minimize network latency as much as we can," explains Mr Ketan Shah – Associate Director,

Information Technology and B2B Business, Angel Broking. "Any time our business-critical systems went down, we would lose revenue as our clients would not be able to execute transactions."

Angel Broking had met rising demand for its applications and databases by adding physical servers in an ad-hoc fashion. By October 2014, the brokerage was running 120 servers comprising a range of makes, models and operating systems. With many of these servers reaching end-of-life and needing replacement, Mr Shah had to decide what type of infrastructure could cost-effectively scale to support forecast growth while improving availability and minimizing the administration workloads of Angel Broking's IT team.

The firm also needed to ensure its business-critical applications remained available if a disaster struck its production datacenter. The firm had a DR site for its business critical applications but the data collected during drills indicated that RTO-RPO were larger than the expected rates and hence DR automation became a crucial need.

The brokerage had already dabbled with virtualization by using VMware to run some of its non-critical workloads. To ensure Angel Broking selected the virtualization product that best met its requirements, Mr Shah thoroughly evaluated offerings from a range of vendors. The evaluation process included procuring hardware to test VMware virtualization product with

VMWARE CASE STUDY

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Mr Ketan Shah – Associate Director,
Information Technology and B2B
Business, Angel Broking

BUSINESS BENEFITS

- Improved availability of business-critical applications.
- Reduced server numbers from 120 to eight and racks from eight to two
- Established infrastructure to support growth without further hardware investment
- Reduced average recovery times in the event of a disaster.
- Reduced requirements for datacenter space by 75% and power & cooling by 80%

VMWARE FOOTPRINT

- VMware vSphere 5.5
- VMware vCenter Site Recovery Manager
- VMware vCenter Operations Management Suite

APPLICATIONS VIRTUALIZED

- Microsoft SQL Server
- Oracle Financials SAP Business Objects
- Marketplace Technologies for Back-Office application

PLATFORM

- HP servers
- EMC storage
- Cisco networking

a range of operating systems and some sample applications. System engineering, application, database and user teams participated in the testing, which was based on a list of available and desired product features.

“We considered what each solution offered against a range of criteria, including flexibility, business continuity, ease of deployment, manageability and usability,” says Mr Shah. “VMware vSphere met our expectations in each category.”

Angel Broking’s IT team gained further confidence in its selection of VMware when the vendor showcased its new products and roadmap in a workshop with the brokerage. The firm started implementing VMware vSphere in March 2014 and migrated its business critical systems and databases to the virtualized infrastructure in May 2015. A staged deployment process minimized downtime and ensured the performance of business-critical systems and databases did not degrade. This reduced the risk of clients experiencing disruptions that may have tempted them to take their business to rival brokerage houses. “In most cases, we had allocated more resources than were necessary to ensure a smooth transition,” says Mr Shah. “We then recaptured these surplus resources for use elsewhere in our infrastructure.”

Angel Broking is now running its virtualized infrastructure on eight servers distributed across two racks in its primary datacenter, down from eight racks when the firm ran a purely physical datacenter. This has enabled the brokerage to reduce its datacenter real estate needs by 75 percent and

its power and cooling requirements by 80 percent. Old server hardware has been reallocated to non-critical, non-production needs, while the virtualized infrastructure runs on powerful new-generation machines.

In addition, the virtualized infrastructure has enabled Angel Broking to dramatically reduce the time required to deliver new products to market. Prior to adopting a virtualization strategy, a server upgrade involved a long hardware acquisition period which resulted in business downtime. Today the firm can allocate resources to projects with an hour.

The brokerage has now combined storage-based replication technologies from EMC with VMware vCenter Site Recovery Manager to automate the recovery of critical applications in the event of a disaster. Angel Broking’s testing has proven that these applications can be recovered quickly should catastrophe strike its production datacenter. Finally, in May 2015, the brokerage implemented VMware vCenter Operations Management Suite to administer its virtualized infrastructure at a granular level and optimize the allocation of resources to power its key applications.

Angel Broking is so impressed with its new infrastructure that it plans to head to the cloud with VMware. The firm has opened discussions with VMware about deploying network and desktop virtualization. “It has been an extremely pleasant experience working with VMware to date and we expect this to continue in future,” concludes Mr Shah.

