



“Running VMware vSphere 4 on a powerful hardware platform gives us the scalability to support our ambitious growth plans and create a private cloud that enables us to deliver our infrastructure resources as services to the business as and when required.”

— Shayan Pervaiz, Project Manager, IT Security/BCP and DR, Atlas Bank

KEY HIGHLIGHTS

Challenge

Secure production data held on distributed test and development servers, reduce power and cooling costs and deliver the scalability to support business expansion.

Solution

VMware® vSphere 4 enables consolidation of physical hardware to eradicate server sprawl and lower power and cooling costs while offering scalability, performance and high availability.

VMware at Work

VMware vSphere 4, featuring:

- VMware ESX™ 4
- VMware Consolidated Backup
- VMware vCenter Server

Deployment environment

- ESX 4.0 on Unisys E7000 servers with four dual-core 3.4GHz Intel Xeon processors and 32GB RAM
- vCenter Server on Unisys ES3220 server with two dual-core 2.8GHz Intel Xeon processors and 4GB RAM
- EMC CLARiiON CX3-10 – 3TB and 4GB fiber channel links
- Guest operating systems: Microsoft Windows Server 2003 32-bit and 64-bit and Red Hat Enterprise Linux
- Test and development/pre-production applications: Oracle Siebel customer relationship management, ATM switch/middleware, Lotus Domino, some custom-developed applications

Atlas Bank

Envisioned as a progressive and dynamic bank, Atlas Bank helps customers manage personal and commercial finances with ease and convenience. The Pakistan-based bank is supported by the Atlas Group, a leading manufacturing, financial services and trading group. The Pakistan Credit Rating Agency Ltd has awarded the institution a long-term credit rating of A- and a short-term credit rating of A2.

To support an expansion program that saw 15 branches opened in 2008, Atlas Bank is upgrading its core banking system and using an Oracle customer relationship management (CRM) system to segment and analyze its customer base. The bank is also modernizing its datacenter infrastructure to reduce server sprawl.

With 50 production servers in its primary datacenter and a further 50 distributed across its headquarters to enable test, development and pre-production, the bank knew it had to consolidate. “The primary concern we had with this architecture was security, although we also had power and cooling issues,” said Shayan Pervaiz, Project Manager, IT Security/BCP and DR, Atlas Bank. “We had samples of production data on servers – primarily high-end personal computers – that resided outside the primary datacenter with its strict controls on access and data.” After trialling VMware virtualization for about four months to secure senior management approval, Pervaiz realized even greater benefits could be achieved by enabling fault-tolerant cloud computing through VMware® vSphere 4.

Atlas Bank then engaged VMware Partner New Horizon to carry out the implementation, which took less than five days and was completed in late July 2009. The institution intends to run 45-50 virtual machines on two high-end Unisys host servers linked to an EMC networked storage system. These machines are providing new development, user acceptance testing and pre-production environments for key applications such as the Oracle CRM system. Atlas Bank has shored up its security by consolidating test and development to the datacenter and is planning to extend virtualization to its production applications and disaster recovery site. It is also planning to explore the benefits of storage and networking virtualization enabled through VMware vSphere 4.

Results

- Reduced time to procure and commission a new server from several weeks to 11 minutes
- Saved US\$200,000 in hardware procurement costs
- Achieved a server consolidation ratio of 25:1
- Increased hardware utilization from about 5% to 45-50% (CPU) and 60-65% (RAM)
- Reduced power and cooling costs

