



Virtualisation Expedites Drug Discovery For Bilcare Research

With concepts such as telemedicine making larger footprints in the country, the use of technology in the healthcare sector is creating ripples in the public forum. This dialogue includes not only direct healthcare providers but also the support system integral to the overall picture. Biztech2.com brings its readers a case study of one such company, Bilcare Research, which turned to IT to improve patient healthcare outcomes.

Bilcare Research partners with global pharmaceutical and healthcare companies to deliver innovative solutions that improve the speed and quality of drug discovery and ensure the authenticity of drugs. Bilcare Research has a global footprint with modern manufacturing and R&D plants located across the US, Europe, India and Singapore. To cater to its dynamic IT landscape, Bilcare virtualised its entire IT infrastructure on the Red Hat Linux virtualisation platform. Taashee Linux Services was the implementation partner.

Business Challenge: Need for a Scalable IT Landscape

Bilcare's business growth in the last three years had led to a horizontal growth in IT systems and applications. The emerging focus of Bilcare on technology-led solutions and services for its customers required a scalable and cloud-like IT landscape to host mission-critical systems. On the other hand, optimising the IT spend, leveraging existing IT Assets and no further augmentation of the IT team was the need of the hour.

Migration of enterprise applications, performance, scalability, and stability of the virtualised platform were key concerns. "Our main concerns revolved around server utilisation and performance and continuity. We wanted a robust solution with minimal footprint and without any new complexity for up-time availability during and post the virtualisation project," says Manoj Arora, CIO, Bilcare Research.

Implementation Phases

Bilcare wanted a cost-effective solution that would provide operational agility and enterprise-class reliability and performance. The absence of a mature, hosted, third-party cloud services offering necessitated the building of a scalable, virtual landscape at Bilcare's Global Data Centre in Pune, India.

In the first phase of installation, around 15 servers including Microsoft Exchange, Active Directory Server, File servers, Web servers, SQL servers and other specialised application servers were virtualised. In the second phase, Bilcare smoothly migrated SAP Instances to the Red Hat virtualisation platform. The transition was trouble free for business users and released some IT assets, besides making the deployment landscape homogeneous and leading to an increase in operational efficiency for the IT team.

Overall, Bilcare consolidated its entire production environment deployed on about 35 physical servers to six virtualised host servers with planned capacity available in the virtualised environment for future growth.

Benefits

Even as the existing infrastructure cut over to Red Hat Enterprise Virtualisation, most of the network and security infrastructure remained the same. "We did not have to rewrite any of our existing network & firewall policies," says Arora.

Red Hat Linux virtualisation helped Bilcare to reduce its server footprint. It also brought in significant savings in power and cooling needs. Another benefit was that configuration and settings from the physical world could be migrated to the virtual world without any major changes or additional complexity.

"The Red Hat Cluster suite bundled with the Red Hat Enterprise Linux Advanced Platform and fully supported by Red Hat Virtualisation is a significant value addition," says Abhishek Datt, CTO, Taashee Linux Services. "Without additional investment, Bilcare will get a proven fault tolerant system capable of automatically migrating virtual machines when hardware or system failures occur on the clustered physical servers."

Due to the integrated virtualisation approach in Red Hat Enterprise Linux, the Bilcare IT team did not require additional training or resources while transitioning from a physical to a virtualised environment. "The same IT team, which was managing the responsibility for our physical infrastructure, is now managing the entire virtualised infrastructure, and with greater ease," concludes Arora.