Enabling a Virtual Desktop Environment

With a high-performance infrastructure solution deployed by Progression, a leading manufacturer of container glass sees improved productivity, and reduced operation costs

The customer is one of the frontrunners in the Indian packaging industry and the leader in the glass packaging segment. The group is headquartered in a major Indian city. Its manufacturing operations are spread over six centres in India. The company also has presence in several more locations across India, and one location abroad.

The company has embarked on a very aggressive growth plan through Greenfield and brownfield expansions with investments of Rs. 25 billion.

The company's main data centre is located in northern India, while its disaster recovery data centre is in a city in eastern India. The company has over 1000 employees who use computers for their work.

Challenges

Disparate user experience: The high rate of growth resulted in a range of issues for the customer. Adding IT infrastructure to enable these personnel was consuming a significant amount of time. The company ended up with a lack of homogeneity across its various locations. The user experience was vastly different in different locations.

Compliance: With each location having its own way of provisioning and managing the IT infrastructure, the company faced a host of compliance issues.

Data security: All data resided on the users' PCs, and this constituted a huge threat to the enterprise data.

Waste of IT resources: The company realized that the IT resources were not being used in an optimal manner. Software licenses were getting added with every computer purchased, when not every user needed to use all the software that was being deployed. While it was spending on getting high performance IT resources for its employees, much of it was actually going to waste.

> **"Earlier, the IT team spent all its time provisioning hardware, installing software,and fixing breakdowns. Now, the VDI environment makes infrastructure management very easy"**

Looking for the Right Partner

The customer was looking for a solution that would address these challenges and yet be able to deliver high performance user experience that its employees were accustomed to so that productivity would not be affected.

Progression

Benefits

Uniform user experience: Every employee through the organization has the same experience on the VDI console. And the performance is comparable or better than the old PC-based setup.

Improved productivity: With less downtime faced by the end user, productivity levels have improved across the organization.

Reduced operational costs: Managing over 1000 user desktops had become a high expense exercise for the customer. Frequent breakdowns and applying patches and fixes were increasing the operational expenditure. With the new VDI setup, operational expenses have reduced significantly.

Reduced incremental capex: Adding new consoles as new users join the organization is very easy and does not require a huge expenditure.

Improved data security: Data is now centralized and backed up regularly.

Enhanced IT productivity: The VDI environment makes it easy to manage the infrastructure and the team can focus on more strategic activities.

The company had a long standing association with Progression Infonet and asked them how this could be addressed. It was well aware of Progression's passionate focus on new and emerging technologies that have high potential to become mainstream a few years down the line. The customer was confident that Progression would be able to suggest the right technology setup that would work best for their organizational needs.

Progression had identified virtual desktop environments as a high-impact business enabler a few years ago and developed inhouse expertise in this. So Progression was well positioned to recommend this as the best solution to the customer's business challenges. Progression also created a Proof of Concept for the customer to demonstrate the potential business benefits of this deployment.

Solution

The solution proposed was a distributed Virtual Desktop Infrastructure. Each location would have its own centralized compute and storage setup, and all users would log into this setup using their virtual desktop consoles.

Though the company had its primary and DR data centres in place, the issue of inefficient WAN performance meant that the end user experience could get impacted, often severely, because of the high latency. Hence, it was recommended that all locations have their own VDI setups.

A scalable compute infrastructure was set up using high end IO design components. Each location was given a high performance storage clocking 150,000 IOPS so that end users would see no difference in performance. One of the key requirements of the customer was that a move to a virtual desktop environment meant a work culture change for the users, and hence performance had to be kept at par with the old setup, or better. This was addressed by the high end setup comprising HP DL980 G7 servers with different configurations (8 CPU/1 TB RAM/4 CPU/512 GB RAM or 256 GB RAM), along with a 1.28 TB HP IO Accelerator with 8x 900 GB HDD. The specification varied depending on the number of users at each location.

The software to manage the setup included VMware View Manager 5, View Composer, LocalMode, Persona Management, ThinApp (Packager, Client, WS), vShield Endpoint and vCenter Server Standard and vSphere.