CASE STUDY
Customer: Hindusthan National Glass & Industries Ltd (HNG)
Solution: Virtual Desktop Infrastructure

Snapshot

Hindusthan National Glass & Industries Ltd (HNG) is one of the frontrunners in the Indian packaging industry and the leader in the glass packaging segment. It has presence in 11 locations, including one in Germany. The company has made international acquisitions and has been seeing steady growth over the past few years. It has over 1000 employees who use computers for their work.

Challenges

- Disparate user experience
- Compliance
- Data security
- Waste of IT resources

Solution

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

Benefits

- Uniform user experience
- Improved productivity
- Adding new users is now easy
- Improved data security
- Reduced operational costs
- Reduced incremental capex
- Enhanced IT productivity

Enabling a Virtual Desktop Environment

With a high-performance infrastructure solution deployed by Progression, Hindusthan National Glass & Industries sees improved productivity, and reduced operation costs

Hindusthan National Glass & Industries Ltd (HNG) is one of the frontrunners in the Indian packaging industry and the leader in the glass packaging segment. HNG enjoys more than 55% market share in the organized sector and has a turnover of over Rs 15 billion. Its products are available in more than 20 countries. The HNG group is headquartered in Kolkata. It is listed on the BSE, NSE and CSE, and has a market capitalization of around Rs 22.70 billion. Its pan-India manufacturing operations are spread over six centres: Rishra, Bahadurgarh, Rishikesh, Puducherry, Nashik and Neemrana. HNG also has presence in Kolkata, Halol, Naidupetta, and in one location in Germany.

HNG has embarked on a very aggressive growth plan to double its existing capacity by 2013 through greenfield and brownfield expansions with investments of Rs. 25 billion. The company has made international acquisitions and has been seeing steady growth over the past few years.

> **Comment [EPS1]:** This is an estimate from their press releases. Pls confirm

The company's main data centre is in Bahadurgarh, Haryana, while the disaster recovery data centre is in Rishra, West Bengal. 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 HNG. The number of personnel who use computers grew rapidly. Adding IT infrastructure to enable these personnel was consuming a significant amount of time. Infrastructure kept getting added over time, and HNG ended up with a lack of homogeneity across its various locations. The user experience was vastly different in different locations. This impacted productivity.

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: With the continued provisioning of new computers and associated software, HNG 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. The company realized that while it was spending on getting high performance IT resources for its employees, much of it was actually going to waste.

Looking for the Right Partner

HNG 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.

HNG had a long standing association with Progression Infonet and asked them how this could be addressed. HNG 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. HNG was confident that

Progression would be able to suggest the right technology setup that would work best for their organizational needs.

Progression prides itself in tracking technologies closely and identifying the ones that are likely to evolve into high-impact business enablers. It invests in building skills in these new technologies and works on gaining expertise in them. Progression also invests in purchasing the equipment required to make this happen.

Progression had identified virtual desktop environments as one such technology a few years ago and developed inhouse expertise in this. So Progression was well positioned to recommend this as the best solution to HNG's business challenges. Progression also created a Proof of Concept (PoC) for HNG to demonstrate the potential business benefits of such a 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 HNG 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 would 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 HNG 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.

Benefits
The implementation was done in early 2011. The new infrastructure setup has addressed all the key challenges faced by HNG as well as brought in several benefits as well. Over time, HNG expects to see significant savings on capital expenditure as well as running costs.

Uniform user experience: From Germany to India, Kolkata to Nashik, or Rishikesh to Naidupetta, every employee at HNG has the same experience on the VDI console. Identical end user desktops are provisioned from a centralized golden image. And the performance is comparable or better than the old PC- based setup.

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

Adding new users is now easy: Earlier adding new desktops and installing software was a time consuming task. Now as more users join the company, adding new consoles to an up-and-running infrastructure is a quick job.

Reduced operational costs: Managing over 1000 user desktops had become a high expense exercise for HNG. Frequent breakdowns and applying patches and fixes were increasing the operational expenditure. With the new VDI setup, operational expenses have reduced significantly. The team needed to manage all the users is also a smaller one now.

Reduced incremental capex: Adding new consoles as new users join the organization does not require a huge expenditure. Any existing console (monitor, keyboard and mouse), a handheld device or even a smart phone can plug into the VDI setup and start working well. Also purchasing such consoles costs only a fraction of the cost of a PC, and they have a longer life than PC as well.

Improved data security: Data is now centralized and backed up regularly. This means HNG has all data in a centralized secure place, the data centre. Dependence on users saving data on their computer hard disks is now a thing of the past.

Enhanced IT productivity: With the old PC-centric infrastructure, the IT team spent all its time provisioning hardware, installing software, and attending to breakdowns. The VDI environment makes it very easy to manage the infrastructure and the IT team is freed up to focus on activities that are more strategic to the business.

Earlier, the IT team spent all its time provisioning hardware, installing software, and fixing breakdowns. Now, the VDI environment makes infrastructure management very easy, and the IT team is freed up for more strategic activities.

Solution architecture for the Virtual Desktop Infrastructure deployed at HNG

About Progression
Progression Infonet Pvt. Ltd. was incorporated in 1995 with a vision to provide and optimize IT computing infrastructure. We are an end-to-end systems integration company having key partnerships with VMware, HP, Sun-Oracle, Microsoft, Linux, Solaris, and Oracle. All our engineers are certified for designing and architecting, selling, servicing and optimizing computing infrastructures based on solutions from these market leaders. Progression is a process driven organization. We ensure service delivery as per the ITIL framework. We are headquartered in Gurgaon and are present in New Delhi, Noida, Mumbai and Bengaluru.