

Choice Case Study

Virtualization Solution for Infotech Enterprises Ltd

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Project Background

Infotech Enterprises was planning to consolidate their 300 desktops. The environment is Windows and GIS Applications with heavy workloads. Roaming users as well as multiple users need to access a single workstation, data security, and budget constraints and all this should be addressed without compromise. The benefits of virtualization should be clear after the project is completed.

The key of the project is to apply the technology that has already been deployed to garner the additional benefits. Expense was kept in line with business needs and the solution could be rolled out in stages, minimizing disruption to the business. Adding to this all these desktops are running on antiquated hardware to support a work environment of 24/7; where users access the data 16x7 in shifts and client also gets to access at their own working hours. So the desktops should work with full performance all the times with Heavy Graphic Applications like – AUTO CAD and GIS applications.

Due to the nature of current deployment; storage scale cannot be independent of the servers. Servers were procured to augment storage needs. This has caused rapid proliferation of desktops, increasing power needs, cooling needs and most importantly escalation of system administration costs. In order to mitigate these issues and gain additional benefits such as capacity on demand, agile data center and increased business efficiency.

Project Challenge

Infotech was facing the same problem like other mid-sized businesses today. They had old equipment that needed to be replaced. They were able to upgrade and implement virtualization on many of their servers, but their desktops were out of date. They also had a problem with mobile users who needed access to their own desktops wherever they might be – on the floor or in another building and could not use laptops as they are primarily for professionals who required mobility outside Infotech facilities.

The balance between making information and IT service available anytime, anyplace and making sure it is protected was a challenge. When workers become mobile, access to their data presents a security risk. Although Infotech was aware of all these problems, their budget would simply not permit a big capital expense.

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VMware Virtualization

Choice Solutions in conjunction with the Infotech technical teams worked closely on this project. This was done to make it possible that the solutions provided would overcome the limitations and support for the environment. We did the Capacity Planning to know the Workload on Servers and calculate the storage capacity, we ran the Capacity Planner Tool to know the Present Utilization and know work loads for Graphic Applications – AUTO Cad and GIS Applications. Then finally we suggested the Hardware required for Consolidating 50 Server into few 9 Blade Servers and Storage of 7TB with Virtualization. With this we also explained the benefits of High Availability, DRS, VMotion and Backup.

Suggested Solution:

- HP Blade Server
- HP EVA 4400 Storage–Hardware
- VMware ESX Server virtualization software

Backup Solution with Tape Library and Veritas Backup Exec were also connected to the SAN Switch. This will reduce the backup window with its high data access rate as well as avoid chocking the bandwidth of local LAN.

Every user can have their desktop at every workstation since it was virtualized. User data is not stored at the workstation, but it is stored at the server where it can be secured. Since much of the processing occurs at the server, the life of existing workstations was extended by at least three years.

The user's experienced even better performance than with their previously dedicated workstations. Many of the monitors and keyboards of the old workstations were upgraded to give the users the feeling of a completely new workstation. There was no need to 'sell' the virtualized solution to the users as the new departments requested it. Management of virtualized workstations is much easier than management of 'fat client' PCs. Provisioning new users, software maintenance, upgrades, and general desktop support have been simplified, performance increased and costs were reduced.

Key Solution Components

- HP Hardware: HP Blade Servers
- EMC Storage: EMC NS120 Storage
- VMware Software: VMWare View
- Backup Software: Veritas Backup Exec

We ran the Capacity Planner Tool to know the Present Utilization and know work loads for Graphic Applications

Every user can have their desktop at every workstation since it was virtualized.

Client Benefit

- i. Users prefer the virtualized desktops
- ii. Every user has own personal desktop environment
- iii. Multiple users can work from the same workstation
- iv. Every user can work from any of the workstations
- v. Workstation refresh cycle was not required – no capital expense
- vi. Information is controlled and security is improved
- vii. Workstation sessions that become infected by Malware are contained
- viii. Save Money
 - Do more with less
 - Re-user existing investments
 - Extend the life of hardware
- ix. Secure Your Business: For companies that have major loss of data
 - 43% never reopen
 - 51% close within 2 years
 - Only 6% survive long-term

Workstation sessions that become infected by Malware were contained.

About Choice Solutions

Established in 1991 Choice Solutions Ltd. is a leading IT and Facilities solutions provider. Choice Solutions Ltd. business comprises of Six different practices, namely

IMS

- Desktop, Server, Network, Storage, Support, OS, Assets, Apps, Non IT
- Hardware - A-Add, M-Modify, I-Install, C-Change, R-Repair
- Assets, Security, Software Distribution, Upgrades

Networking

- Packaged Services Monitoring & Management
- Products, Security, Design, Deploy, Maintain
- Auditing & Compliance, SOC

Datacenter

- DC Audit, Monitor & Manage, Training
- Assess, Design, Built, Deploy, Disaster Recovery

Consulting

- Business Consulting, CIO & Technology Services, Physical Security, Power Devices, IT Consulting
- DC Consulting, ERP, CRM & Custom Apps

Cloud Computing

- Cold Site – Backup, Disaster Recovery
- Hot Site – HaaS, Software, Manage
- Public Cloud, Private Cloud, Hybrid Cloud
- CaaS, License Software, IaaS
- Disaster Recovery

Power

- Power Audit, Equipment Management
- Physical Security, Power Devices
- Power Saving Devices
- Design & Audit
- Renewable Energy Products