



Over the past few years there has been a growing trend towards a more centralised computing model. Data centres have grown in size and larger organizations have started to share resources. This has been particularly true in the public sector where local government and agencies have come together to form service 'clusters'. The cost savings are immediate: centralising applications and data removes duplication and virtualisation in the data centre ensures all resources are utilised efficiently.

Whilst management in the server room has been simplified, many organisations resist taking similar steps with their desktop infrastructure. Data may be stored locally and can limit the degree to which an organisation can centralise.

Virtualising the desktop infrastructure can solve these issues. This paper has been written for those companies that have yet to commit to virtualising the desktop. It details the major benefits that accrue from VDI and, for balance, also identifies the disadvantages.

Major Advantages

Virtual Desktop Infrastructure improves key business processes, provides better service levels for users and makes IT management much more efficient. We will look at the bottom line first: identify where the real cash savings can be achieved and then at management improvements where the efficiency gains are far harder to quantify.

Shared Resources

VDI removes the need for local servers and helps the IT department complete the centralising process. Once data and applications are in one place, further reductions in server numbers can be achieved through virtualisation. Real savings in hardware refresh costs are enhanced by reduced power consumption and a smaller server footprint.

Rolling Refresh

For many organisations the need to replace PCs every three years is a major expense. Thin client devices are not only cheaper than the average desktop PC, their useful life is far longer. Savings are immediate and where a company has significant numbers of users, ROI can be measured in months rather than years. Hardware failure is cheaper and easier to resolve. Thin client replacement simply requires the user to plug in a new device. The low cost of devices combined with their longer useful life means that remote sites can be provided with a number of spares. Hardware failure can be resolved immediately by the user effected.

Faster, Easier Application Deployment

Security patches, updates and new applications are far easier and faster to deploy. All updates are done centrally; management time is not taken up scheduling upgrades to individual machines and sites. Changes are implemented immediately across every desktop.

The speed and uniformity of deployment not only increases security it also reduces cost. Staff are released from repetitive operations for employment on more strategic activities.

Improved Management

Many of the efficiency gains realised by migrating to a Virtual Desktop Infrastructure may be difficult to quantify. However, the potential benefits from a data availability and improved management prospective could be greater than the more obvious, quantifiable cash savings.

Improved Data Integrity

All user data is stored centrally, making it easier to manage the whole data structure including metadata. Data stored centrally is easier to certify, reconcile and maintain consistency. It makes verification of adherence to regulations much easier to manage, prove and save on management time.

Reduced Downtime

Centrally managed data is easier to back up and manage, securing the business and reducing downtime in the event of servers going off line. Systems can be built into the data centre that recover locally, only failing over to a second site during a serious disruption. Disaster recovery is much easier to plan and implement when systems and data are centralised.

Improved Security

VDIs are deployed where there is a clear and unambiguous need for high levels of security. As no data resides on users' devices, the risk of losing confidential information (via a stolen laptop) is significantly reduced. Secure remote access combined with having all the data in one place makes it easier for the IT department to audit users' activity and grant temporary access as required.

For the commercial organisation having confidential data in one place; financial accounts, HR records and customer information, it makes it easier to keep records and access secure.

The downside to VDI

A fear of change is the greatest opposition to VDI. Users can feel their autonomy eroded as they lose their PC, with its local applications and storage. Early thin clients have contributed to urban myths of slow response times and poor user experience. Whilst it is true that modern VDI relies heavily on the network, improvements in bandwidth and network performance have made the old complaints of frozen screens and slow response times a thing of the past. The latest devices deliver an equal user experience to that of the PC. If the network is not managed properly there could be a security risk. However, this problem is eliminated through good, proactive management.

Summary

Migrating to a Virtual Desktop Infrastructure delivers organisations of all sizes real ongoing savings and improved processes. Hopefully, this document will confirm the technical and business case for VDI is unassailable.

About CWL

CWL Systems specialises in ensuring the availability of critical data. If you'd like to discuss any questions or concerns you have in these areas, or points raised in this paper please call us on **0845 880 1285** or visit **www.cwlsystems.co.uk**.

