



Business Systems Group

SUN Ray Virtual Desktop Infrastructure (VDI)

Q. Why wouldn't you do this? "turn business strategy into IT reality"

- Align IT closer to the business and respond quicker to their needs
- Reduce your costs – hardware, support and maintenance
- Reduce electricity consumption – power and air conditioning by 70%
- Addresses green issues – political, moral and taxes

The Challenges

Do you need to regain control of the corporate desktop?

- Managing remote PCs in remote offices or users homes
- PC Installs, Moves, Adds and Changes - 'IMACs' - usually need to be done out of office hours
- Securing customer information and intellectual property in remote or overseas offices
- The GREEN issue - Reducing power and air conditioning cost
- PC Disaster Recovery and Business Continuity is expensive and a waste of assets
- Total Cost of Ownership (TCO) - the true cost of a PC is not the initial capital expense but the support and maintenance of the over its life time

SUN Ray Virtual Desktop Infrastructure (VDI)

The Solution

Virtualisation technology is changing today's IT industry by enabling more effective use of existing computing assets. While server virtualisation has seen widespread adoption over the last several years, desktop PC virtualisation is now the de facto way of enabling higher asset utilisation and better PC management, without compromising the experience of the end user.

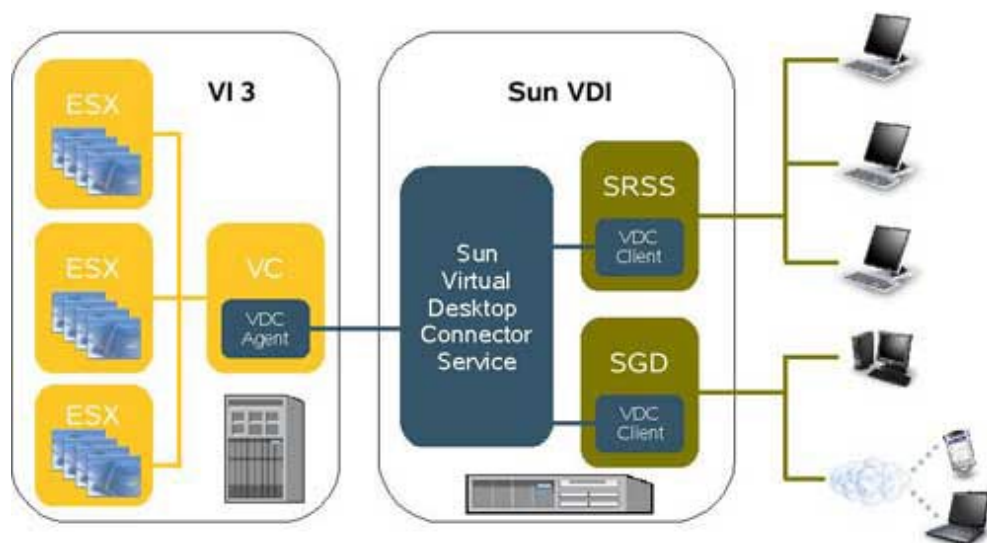
In a VDI, users access their complete desktop environment in a virtual machine located in a secure data centre. The desktop virtual machine running on a Server or Blade is an image of a complete PC (e.g. Vista, XP or Linux) – operating system, applications and configurations.

The Sun Ray Thin Client used to access the virtual desktop image on the server only needs to run an Appliance Link Protocol (ALP). The virtualisation of a pool of PCs enables organisations to provide a true virtualisation solution by fully utilising both the physical and virtual resources available within the organisation.

Sun Virtual Desktop Infrastructure Software allows organisations to deploy a secure, resilient, and available desktop environment because the desktop never leaves the data centre. Users can access their centralised desktops from a wide range of supported client devices, including Windows PCs and Sun Ray virtual display clients. A variety of networks are supported, from LAN to WAN or the public Internet.

The Sun Ray is basically a dumb terminal, it doesn't have a hard drive or CPU and all the computing work is done by a back end server. The user inserts a card into the device which connects the Sun Ray to the back end server. The user is then presented with their desktop session, and if a user needs to swap desks, they simply pull out the card (without logging off or shutting down any applications) and insert this into another Sun Ray. When the card is inserted into the second Sun Ray they are presented with the same applications they were using on the previous Sun Ray. This ensures hardened security and over 40% reduced power and cooling costs (source: IDC) compared to a standard box PC.

The SUN Ray VDI Architecture:



Benefits

- 99.9% availability, i.e. PC user uptime
- Full XP and Vista application compatibility, unlike Citrix
- Ease of managing the end user desktop - no more trips to the desk to fix
- Hardened security for data (IP and customer records) and hardware assets using SMART cards
- Increased performance across the network as ALP is more latency tolerant compared to RDP (only changes made by the user, i.e. key strokes, are refreshed as opposed to the whole screen)
- The GREEN issue - 70% reduction in power consumption and air conditioning
- VMware provides instant built-in DR capabilities, allowing business continuity with very little down-time to the business
- Capital cost similar to standard box PC's and a 40% reduction in overall TCO (support and maintenance)
- source: IDC

Architecture Overview

BSG is partnering with market-leading Sun and VMware to create a compelling end-to-end Virtual Desktop Solution. VMware Infrastructure 3, is used to run multiple isolated desktop environments, primarily Windows XP Professional, in virtual machines on a server or servers in the data centre where they can be secured and managed centrally.

This robust and scalable solution includes:

- Client Tier — the end user access points or devices. Includes Sun Ray virtual display clients or nearly any modern desktop device.
- Access Tier — the infrastructure (either physical or virtual) that enables and brokers connections between the client tier and the virtual desktop tier; critical for overall security and scalability.
- Virtual Desktop Tier — the hardware, virtualisation software, and storage for all virtual desktop images. Includes VMware Infrastructure 3, Sun Fire x64 servers, and Sun StorageTek storage and software.
- Client Application Tier — the farms of applications traditionally delivered to the desktop through application publishing products or display protocol

A Virtual Desktop Solution Supports:

- General office workers
- Disaster Recovery and Business Continuity sites
- Remote offices and home workers
- Offshore call centres and software development sites

The BSG Approach

The BSG approach provides a framework and a set of deliverables to adapt to inevitable changing requirements throughout any project life cycle. By adhering to methodologies that it has developed through experience gained from similar engagements, BSG can offer the following benefits:

- Risks are minimised and made more manageable
- Focused deliverables are established
- Realistic results are delivered
- Flexible adjustments can be made to new or modified requirements
- High degrees of systems acceptance and knowledge transfer are delivered

BSG has been working closely with organisations across many industries to improve the ease of management of their desktop environment. Therefore, when planning for a VDI solution BSG have developed a structured approach using the following process:

- Customer planning workshop
- Full audit/assessment of your current environment
- Controlled evaluation
- Pilot implementation and review
- Scalable Infrastructure design and deployment

Why BSG?

Incorporated in 1987, BSG is an integrated IT practice, designing, deploying and operating IT solutions for its customers.

As a managed services provider BSG has the ability and skills to manage and support Virtual Desktop Infrastructure (VDI) for a range of clients. BSG provides an end to end VDI solution for its customers including technical support via its call centre, providing 24x7x365 1st and 2nd line telephone support, as well as a fully hosted managed service meeting the standards required by ISO27001. This means that by working with BSG customers are able to access and leverage the knowledge and expertise of an organisation that designs, deploys, and operates virtual desktop infrastructure on a daily basis.

If you are interested in learning more about how BSG can help resolve the many virtualisation issues businesses face today, simply contact BSG via the details below:



Next Steps

For further information please contact infrastructure sales on:

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