



## Computacenter guide

### Deploying a Virtual Desktop Infrastructure

Enabling a more secure, low-cost desktop environment with Sun's Virtual Desktop Infrastructure, delivered by Computacenter.



## This guide is for you

If you are a senior manager with responsibility for ensuring your organisation gains maximum benefit from its information technology investment.

## Why should you read this guide?

This guide, developed by Computacenter in partnership with Sun, looks at a cost-effective, state-of-the-art solution to the rising cost and complexity of buying and running traditional desktop estates.

Specifically, it shows you how you can take advantage of Computacenter's unrivalled expertise in deploying more Sun solutions in more varied customer environments than any other provider. We recommend, design, provision, integrate and manage Sun's Virtual Desktop Infrastructure, allowing you to:

- Reduce the costs of your desktop estate
- Reduce the complexity of managing it
- Ensure that it's both flexible and agile
- Secure your organisation's information
- Make clear wins on your green balance sheet

Sun's Virtual Desktop Infrastructure (VDI) is a highly secure, resilient desktop environment deliverable on a wide range of client devices, from traditional PCs to Sun Ray ultra thin clients to PDAs.

## Executive summary

Today's computing environment, like today's business environment, is getting tougher, with IT departments required to deliver mission-critical systems more efficiently, at lower cost and with greater flexibility. The pressure is on to:

- Meet the needs of a highly mobile, often globally dispersed workforce
- Keep corporate information secure
- Answer the demands of the green agenda
- Provide agile systems that can easily and speedily respond to changing markets and company structures

For more than 20 years, Sun has been at the forefront of the gradual evolution in desktop technology. PCs running rich applications independently of one another have gradually given way to the ultra thin client solutions of today, providing a dedicated virtual machine per user with resources centralised and managed on a server and delivered across a network. Sun's Virtual Desktop Infrastructure (VDI) is a highly secure, resilient desktop environment deliverable on a wide range of client devices, from traditional PCs to Sun Ray ultra thin clients to PDAs.

VDI offers a solution to many of the problems associated with traditional business systems. With Sun's VDI delivered by Computacenter, you can expect:

- A better return on investment than with traditional PC estates
- Your company information – and your business – to be more secure
- Flexibility built-in
- Business agility
- Green credentials
- No retraining overhead

Computacenter is Sun's premier UK partner and has deployed more Sun systems than any other Sun provider. We have developed unrivalled competence in Sun's innovative technologies and built solid expertise integrating all kinds of existing infrastructures – Microsoft and Mac included – into Sun's world-class software. The ultra thin client model offers a cost-effective way forward for IT departments under pressure to deliver more for less. Discover in this guide how Computacenter can help you benefit from the best of this modern approach to corporate computing.

## The desktop today

### Common pain points

#### Computacenter and Sun in the public sector

Penwith District Council in Cornwall needed to gear up for e-Government. An audit of the Council's infrastructure revealed that its IT platform 'would not allow us to meet the Government's vision', says Andrew Mann, the Council's IT Head. 'We began to specify requirements and decided that the most cost-effective solution would be a Sun Ray ultra thin client solution.' He opted for an overhaul of the entire desktop estate, with hundreds of Sun Rays in central and outlying offices all run from a Sun Fire-based server farm.

Andrew again: 'Computacenter managed our partnership with Sun and delivered their services on time and within budget, exceeding our expectations.'

Organisations are under constant pressure to reduce costs, improve reliability and flexibility and protect their information. Many are turning their attention to the expenses of running the desktop.

#### Expensive

Running a desktop estate is a significant business cost, with a high TCO. PCs typically need to be upgraded after only three or four years. Constantly improving software similarly puts pressure on budgets. Increasing sophistication requires ever more highly-trained IT technicians. The need to show a healthy return on investment against a background of budget cuts is sharpening the focus on desktop costs.

#### Complex

Keeping dozens – or maybe hundreds – of PCs updated and working properly together is complex, costly and error-prone, requiring considerable technical effort to ensure consistency of configuration across organisations.

#### Inflexible

To stay competitive, organisations need their people to be able to work flexibly. They need to be able to work on the move, from home, from all your locations and from any physical desk, all of this whilst accessing company servers and doing everything they can in a standard office environment. But traditional PC configurations make it hard to achieve this degree of flexibility.

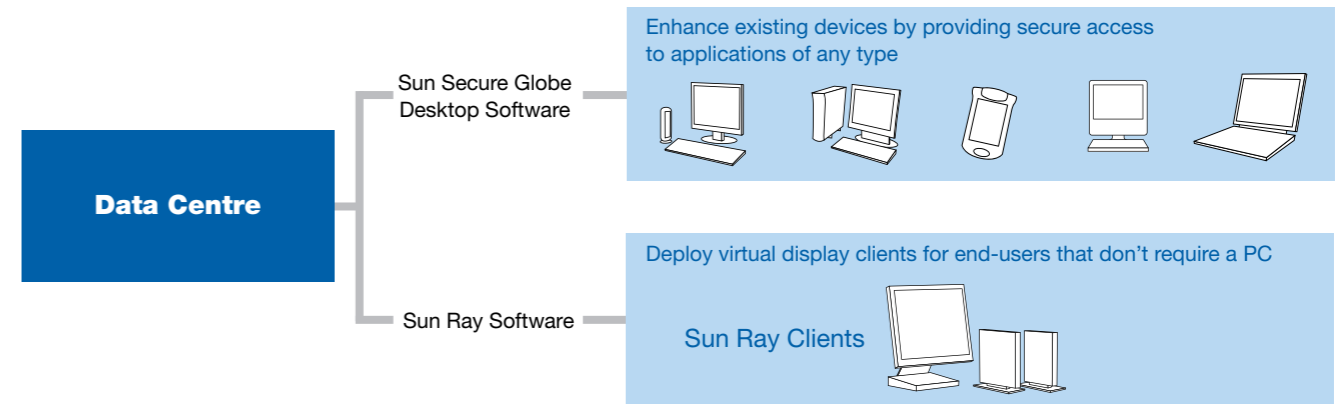
#### Vulnerable

Sensitive information distributed on lots of PCs is harder to keep track of, easier to lose – or indeed, to steal – and more vulnerable to malicious attack. It is possible to protect your information, but it's a costly overhead requiring constant vigilance.

#### Greedy, not green

Traditional PC configurations consume a great deal of energy and necessitate expensive building cooling.

## Sun Virtual Display Computing Offerings



## Sun VDI:

Enabling smarter more secure low cost desktop environment.

Sun's VDI – Virtual Desktop Infrastructure – allows you to consolidate data, applications, operating systems and processing in your data centre, where they belong, delivering virtual desktops to a wide array of devices – PCs, thin clients, Macs, Sun Ray virtual display clients, PDAs and mobile devices. Centralising your entire IT resource in this way makes it cheaper and easier to manage, more flexible and far less power hungry than traditional PC estates.

### A unique virtual desktop environment

Virtual Desktop Infrastructure is a highly scalable, end-to-end infrastructure. It works in conjunction with VMware Infrastructure 3, Citrix or Terminal Services to provide a dedicated virtual machine per user, leveraging several VMI features for a truly dynamic desktop. Key features include:

- A highly secure transport between client devices and the virtual desktop, allowing secure access through firewalls for disaster recovery and remote access.
- Built-in support for Sun Ray ultra thin clients, including readers for smart multi-function cards, offering extra levels of security and functionality.
- Sun Virtual Display Connector – a brokering layer, providing mapping of end-user connections to server-based desktop sessions, allowing sessions to be started and switched seamlessly between any supported client. Users can suspend sessions and pick up where they left off, on a different client, literally anywhere in the world.
- Sun Secure Global Desktop – unifying a diverse desktop environment into a cohesive application access infrastructure, optimised for available bandwidth. Applications are deployed in the data centre and accessed simply by any client device with a Java enabled browser.

### VDI: choice and flexibility

**Client devices** – use your existing desktop estate – PCs, Macs, mobiles, PDAs, or any device with a Java-enabled browser – or switch to lean, green Sun Ray ultra thin clients.

**Connection** – use high performance protocols over any network connection, LAN or WAN.

**Operating system** – continue to use your desktop environment of choice – Windows (including Vista, XP Pro, Windows Server), Linux, Solaris, Mac OS.

**Applications** – flexible, controlled access to applications, enabled on a per-user basis.

### In the data centre

At the core of VDI are powerful Sun Fire x86 servers (although it's not tied to Sun and will run on other manufacturer's systems). They hold your organisation's data, applications and desktop operating systems, provide controlled access to the web, all the processing capacity you need and centralised management of the whole infrastructure – reducing complexity, cutting costs and providing a safe and secure computing environment.

### Sun Ray ultra thin clients

VDI fully integrates a wide array of client devices, enabling you to maximise your existing investment in PCs. Making a strategic choice in favour of Sun Ray ultra thin clients, however, provides a range of additional benefits – longer asset life, lower carbon footprint, lower capital, support and intervention costs. With Sun Ray clients, there's no local data, no addressable flash memory, no cache, nothing worth stealing and nothing to manage – complete security and absolutely no vulnerability to malware, all with the added security that comes with a smart card-reader.

Sun's VDI offers a cost-effective and secure solution to many of the problems associated with traditional business systems. Computacenter deploys more Sun solutions in more varied customer environments than any other provider and our partnership with Sun means we can evaluate and recommend precisely the right Sun solution for your needs. Our end-to-end capabilities, rapid provisioning, implementation and service management ensure a speedy return on your investment.

## The business case for VDI

VDI delivered by Computacenter – the heart of effective business systems

### Deploying for success

Computacenter is Sun's number one technology integrator – we deploy more Sun solutions in more customer environments than any other provider. Assessing your needs and advising you on the right Sun solution is a carefully managed process.

### Right for you?

We start by auditing and assessing your PC estate and your business needs, taking into account where your organisation is headed and the market you operate in. At the same time we ensure that you understand the technologies, the issues and the options. We'll also provide a mobile demonstration of VDI in action, with typical business systems, software and services.

### Better return on investment

- **Make your money go further** – three-year, risk-adjusted ROI rates of 37%, with payback after 1.8 years, have been independently quantified (*'The Total Economic Impact of Deploying a Sun Ray Environment With Sun Secure Global Desktop Software'* – Forrester Research, September 2006).
- **Save on maintenance and equipment costs** – Sun Ray clients are firmware driven, solid state devices, with no moving parts – and considerably cheaper to buy than 'equivalent' traditional desktop devices. The MTBF (Mean Time Between Failures) is 200,000 hours – or about 22 years – offering significant reductions in intervention costs, whilst provision and de-provision is simple and quick too – a matter of plugging in the display unit, with no configuration tasks; many installations delegate this job to office staff.
- **Save on support** – whether you are installing Sun Ray clients or maximising use of your existing estate, support costs are dramatically lower, as all system management functions are centralised in the data centre. Many organisations are able to achieve ratios of 2 or 3 administrators/2000 employees. Because VDI by-passes the local functionality of a traditional desktop device, the effective life of these assets can be increased.
- **Preserve existing investment** – VDI works with a range of client devices and operating systems, enabling you to continue to secure a return on your existing IT investments.

### More secure data, more secure business

Your organisation's information is held securely in the data centre, so there is no local data to be compromised, stolen or infected. Because your people can access their desktops from anywhere, there's no need to copy files onto memory sticks. Sun Ray displays don't function outside their environment and are not a target for theft.

### Flexibility built in

Giving your people true working flexibility is an integral part of the design of VDI, not a bolt-on. A user session can be suspended with the current state held on the server and later restarted from any compliant device, anywhere in the world. Real hotdesking and remote working are native to VDI, creating opportunities for savings in accommodation costs.

### Business agility

VDI deals with many of the IT problems associated with supply chain integration and company acquisitions. Companies new to your corporate network can be plugged into your IT resources simply and efficiently.

### Green credentials

Sun Ray clients use 4 watts and Sun Ray monitors 24 watts; by comparison, PCs demand anywhere between 70 and 400 watts. Power consumption is far lower and so, of course, so is your requirement for building cooling. And these savings can be quantified in your carbon accounting arrangements.

### No retraining

Because VDI works with a wide range of industry standard operating systems and platforms, you can continue to use your current operating systems and application sets. So there's no requirement for retraining programmes and your investment in knowledge and support is protected.

### Making a compelling business case

We offer a business value audit to help you understand and fully quantify the benefits and productivity gains of moving to VDI solution.

### Proving the solution

Computacenter's Sun-authorized Solutions Centre provides a state-of-the-art simulation environment in which we can fully prove and optimise your deployment to reduce the go-live risks.

*Computacenter offers a range of VDI services to meet the wide and varied needs of customers.*

## What Next?

To find out more about how VDI can help your business, contact us :

- Contact your account manager
- Call 0800 731 5858
- Email [suncentre@computacenter.com](mailto:suncentre@computacenter.com)
- Visit [www.computacenter.com/sun](http://www.computacenter.com/sun)

## About Computacenter

Computacenter is Europe's leading IT infrastructure services provider and Sun's premier UK partner – deploying more Sun solutions in more varied customer environments than any other provider. We offer services at every stage of infrastructure investment and our expertise spans all major vendor solutions, with unrivalled competence in Sun's innovative technologies. We handle everything from hardware supply to service supply, managed services to full systems integration, including Sun, Microsoft and Citrix technologies.

## About Sun

Sun's vision, consistently since it was founded 27 years ago, is that "The Network is the Computer". Organisations use Sun technology as a competitive weapon, to create their business advantage and to fuel their growth.

