



Servo Virtualisation Services | Your Executive Guide



Dynamic IT from Desktop to
Data Centre with
Servo Virtualisation Services



Executive Summary

Virtualisation is attractive to organisations as it gives them the opportunity to reset their IT infrastructure and achieve a 'doing more for less' goal. This goal may be reducing power consumption, reducing hardware and physical Data Centre space or improving business continuity and DR services through virtualisation features. At Servo we see the economic climate really driving customers to looking at virtualisation as the most cost effective and demonstrable way to achieve more effective IT. Customers want to do more for less. Virtualisation is the way to make this happen.

Finally, Servo's underlying strategy is that the Desktop and the Data Centre discussion is now converging much more rapidly; businesses really want to see how they can bring them much closer into a single strategy. Servo believes virtualisation is the glue to make this happen.

Virtualisation and Servo

Servo was very early to adopt virtualisation as part of their infrastructure Solution 'stack' in the UK. The opportunities for Servo's customers to take benefit from a partner who had built a secure and robust platform for hosting business applications were too strong to ignore. Servo invested heavily in hosting infrastructure, consulting skills and support desk processes to support customer needs for virtualisation and embrace virtualisation technologies from the leading solution partners such as VMware, Citrix, Microsoft and HP.

Only a few years later and virtualisation is now 'mainstream' for nearly all our customers in one way or the other and demonstrates how technology adoption lifecycles have shrunk in recent years. It also shows that many of Servo's competitors are seeing virtualisation as a way to obtain revenue during a challenging trading period. Servo's view is that virtualisation can be an enabling technology for wider business objectives. The deployment of virtualisation for the sake of technology isn't something that Servo promotes hence the highly consultative approach.

Servo starts by looking at the 'Maturity' of an organisation's IT: the capability and sustainability to deliver IT performance in line with the business goals and aspirations. If physical servers are poorly managed today it is very likely that virtualised servers will be equally poorly managed.

Remember though – virtualisation is NOT a magic pill. Servo differs from other Infrastructure Service Providers due to their huge investment in Hosting Services: you can choose between self-deployment of Virtualised Infrastructure (either on premises or using one (or more) of Servo's Hosting Centres), or tapping into the virtualisation benefits through Servo's Virtual Shared Platform Service.

Virtualisation solutions are typically drawn from the products and capabilities of many Software and Hardware vendors including VMware, HP, Novell PlateSpin, Citrix, Doubletake, Symantec, Red Hat, Vizioncore and Microsoft. Whilst the vendors are very important, Servo seeks to position itself as an independent trusted advisor to ensure that you avoid some of the issues associated with poorly managed Virtualised Infrastructure – issues that ultimately disrupt service, add cost and result in disappointing Return on Investment.

Executive Guide Contents

Servo is helping organisations of all sizes to formulate and execute business strategies that would benefit from virtualisation and help to achieve our customers' business objectives. This Guide concentrates on Server and Desktop Virtualisation; Storage Virtualisation is not covered but Storage Virtualisation Services are available from Servo.

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Servo's Market Appraisal

Servo already knows that the market is ready for virtualisation. We evidence this through the large number of our customers who have already fully or partially virtualised their server estate. Industry analysts, however, still state that the market place is wide open for a much wider adoption of virtualisation for servers and now more so for desktops and applications.

The environmental conditions are now well lined up to make this explosion in virtualisation come to the fore:

■ **Hardware** – it is now fully virtualisation ready. Whether it is the processor, network card, power unit, storage device or memory module, the kit our customers are buying is ready to be exploited much more. This is both for servers and desktops. All vendors are geared up for virtualisation capacity in their products.

■ **Software** – more and more applications are becoming 64-bit aware, web capable and packaged/delivered. Organisations want to lower the costs of deploying applications whilst at the same time improving availability and scale.

■ **Costs** – you care about costs more than ever. The climate is demanding much more prudence around cost control.

■ **Service** – improving end user perception is often one of the top CIO priorities as it aligns to being more competitive in a particular market place and is part of overall efficiency and optimisation.

■ **Climate** – Green IT is a top CIO priority and virtualisation is a major factor in this requirement. Servo uses assessment techniques to measure power consumption and uses virtualisation to present a compelling business case on CO2 savings and overall reduction in space and power and cooling required for servers and desktops. Moving forward as storage becomes more 'Green Aware' Servo is best placed with our partner relationships to give our customers best advice on saving even more IT cash. Finally, because Servo manages its own Data Centres, we are best placed to give real world advice on what it's like to manage a 24 x 7 x 365 virtualised environment and where true power savings can be made.

Few think that Server Virtualisation won't be pervasive. Servo's view is that non-virtualised servers will become a minority within its customer's installed base and its own Hosting Centres. While the decision to evaluate virtualisation will be effectively a given, there are numerous ways to achieve a Virtualised Infrastructure and an increasingly competitive array of solutions from Hardware and Software Manufacturers. It cannot be stressed enough: virtualisation is not a replacement for strong business and quality processes. The reverse is often

true. With improved agility comes improved complexity and risk. We used to talk about Server Sprawl, now we talk about Virtual Server Sprawl. Virtualisation takes away hardware but rarely software instances. In reality if a customer can add a new application in a matter of hours without CapEx to fund a new server they are likely to be supporting more Servers than less – albeit Virtual ones. That is why customers turn to Servo. The new kid on the block is the Desktop. Customers are very interested in Virtualised Desktops because it addresses the area of Desktop Support. If a PC can be anyone's, the patch and application is centralised because it operates in the same way as a Desktop PC (the so called 'fat client'). Servo firmly believes that the Desktop and the Data Centre are converging. So any strategy around virtualisation has to cover the IT Infrastructure from end to end.

The Business Issues: what are we addressing?

High Level Business Issues



Servo Virtualisation Services

We recognise that customers no longer invest in IT projects unconditionally. There has to be substantial, tangible, achievable and rapid return on investment. Driving down costs is at the forefront of every decision that our customers make. Virtualisation does address cost and that accounts for much of the current market fervour.

Why Servo Virtualisation Services?

So why talk to Servo about virtualisation services? Here are 6 of the most important reasons.

1. Servo eats its own Dog Food

We often hear customers ask the question "do you eat your own dog food?" This relates to Resellers and Solution Providers that make recommendations around IT Infrastructure that they do not implement themselves. When it comes to virtualisation, Servo has certainly been eating its own dog food for many years now. Virtualisation has been an integral part of Servo's Hosting Services (packaged as Virtual Shared Platform (VSP) Service and Virtual Dedicated Platform (VDP)). You could say it runs our hosting business and you could definitely say virtualisation has been a major factor to our success over the last few years. Also virtualisation is used today across the Phoenix Group (Servo, ICM Business Continuity and Phoenix) to support internal IT infrastructure with plans to expand on this moving forward.

2. Servo understands what it takes to construct a Business Case for Virtualisation

Many customers take advantage of Servo's consultancy services to formulate a solid Return on Investment (ROI) business case for IT initiatives. Servo will look at the primary business objective and calculate the ROI in time and investment measures. Servo also looks at the bigger picture to identify potential improvements to the greater IT infrastructure and associated incremental ROI. Importantly, the ROI model is given a real-life test through proof of concept. Lastly, Servo will identify where your organisation is positioned in terms of a 'tipping point' for virtualisation – customers need to be ready for virtualisation to benefit from virtualisation.

In summary, Servo acts as a trusted business advisor to construct and prove a compelling business case around IT projects taking into accounts all available variables.

3. Servo understands Infrastructure Optimisation (IO) at the Desktop and Server

One of Servo's key value points is that we look at infrastructure across the board, assessing our customers' maturity for technology transformation. Specifically, we understand how this works in the

Discovery



Identify opportunities for consolidation utilising estate discovery and capacity planning tools. Servo's Capacity Planning Service delivers best practice analysis to help to assess the current server to desktop landscape, determine potential savings not only for hardware & power, but also in terms of effort needed to support the new infrastructure.

Desktop Lifecycle Management, Storage, Management and Business Continuity space. Using IO allows Servo to spot opportunities for virtualisation that are joined up to where our customers want to get to. We talk current state (what state a customer is in today) and desired state (where a customer wants to be in the future). Engagement is typically delivered in the following phases, see illustration.

4. Servo's Virtualisation Hosted Platform

Servo makes extensive use of virtualisation technologies in its "Tier Three" Data Centres, delivering traditional, dedicated servers and a VSP (Virtual Shared Platform) Service which syndicates virtual servers and network and storage out to a range of hosting customers.

The VSP Service provides the ultimate in flexible and scalable hosting solutions, allowing customers to use

Assessment



The Virtualisation Assessment helps a customer determine the viability of implementing virtualisation for server and desktop consolidation and identifies dependencies and risks that may help or hinder a successful project. Included will be a view on capacity performance of the current server and desktop estate, cost benefit analysis, management capability, data management, infrastructure security and the transformation effort to reach an optimised environment.

Design



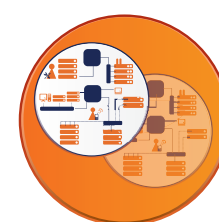
Servo creates the logical and physical virtualisation architectures that include: detailed design concepts, effort impact on our customer and cost plan recommendations for IT investment.

this facility for small scale or short term projects that would never have been financially justifiable on a traditional model, without the need to commit massive capital outlay or have their own IT specialists.

Customers utilising the VSP Service can take advantage of a full range of services including:

- Highly available servers, through the power of VMware HA services, reducing the need for expensive clusters.
- 24/7 monitoring, management and support.
- A secure and resilient platform, implemented following best practice design.
- Fully resilient Data Centre environment and internet connectivity.
- A disaster recovery replication solution with full failover.
- For Microsoft: rental of software licences under the Service Providers Licence Agreement (SPLA).

Validation



Servo often creates a Virtual Test Environment (VTE) to validate the concepts of the virtualisation strategy e.g. 3rd party applications, compatibility concerns, management process run through and high availability benefits to ensure a business case stacks up.

Deployment

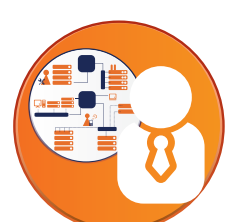


Gain from transformation expertise during pilot migration to full solution deployment across all aspects of virtualisation of desktop, server and infrastructure components. Servo maintains a dedicated Project Management Team working to Prince II standards for both resource and cost programme management.

Servo has also found that by taking advantage of virtualisation technologies, dedicated hosting customers can rapidly accommodate changing business requirements and be liberated from the very tight change control procedures that Tier Three Data Centres have to employ whenever the physical infrastructure is modified. Servo Data Centre Hosting is backed up by a full range of managed services, delivered in line with the ITIL framework.

Many customers take the opportunity to deliver all or part of their IT via Hosting, transitioning to a Virtualised environment at the same time. Servo's Transition Methodology provides a framework for the delivery of successful migration of legacy infrastructure or applications into a hosted environment.

Management



On premise and hosted management of its customers' infrastructure, consisting of a number of hosted virtual shared and dedicated platforms, remote support, 24 x 7 service desk, full business continuity and total service management of customers' virtualisation solution.

A successful transition will encompass all of the following elements:

- Prince II Project Management
- Transition planning
- Evaluation
- Change Management
- Transition Support
- Managing organisational and cultural change
- Release and deployment management
- Service testing and validation

And as a function of a successful transition the following elements of on-going operational management will be defined and established on either a customer provided system or Servo's HP Open-View based ITIL centric service management systems:

- Service Asset and Configuration Management
- Configuration Management System
- Knowledge Management Database and Service System

5. Our Customers who have deployed Virtualisation from Servo trust us

Perhaps the most important aspect of the Servo approach is that we have a significant stock of customers willing to reference our work and speak to prospective clients about how we helped them to achieve success.

6. Our Partners engage proactively and support us

All the partners we use for virtualisation – HP, VMware, NetApp, Microsoft, Citrix among a few have built strong relationships with our consultants to ensure we have access to the best advice and technology roadmaps. We are committed to achieving the highest accreditations across Professional Services and aspire to become best of breed in the virtualisation space. This is our goal and we can demonstrate this proactively.

"Having appointed Servo as our Virtualisation partner, we were delighted with their solution. After thoroughly assessing our current infrastructure and future requirements, work soon began and a smooth and highly successful implementation ensued. Importantly, the Servo team ensured that our internal IT team were thoroughly involved at every stage ensuring a seamless handover to our IT operations department."

Steve Savage,
IT Manager, Gosschalks Solicitors

Servo Virtualisation Services: Benefits

Well managed Virtualised Infrastructure aims to address the following for all sizes of organisation:

- Reduced Capital Expenditure by virtualising existing servers that are under-utilised.
- Lower 'IT personnel to physical server ratio' and associated maintenance costs.
- Save on power utilised to run and cool the Data Centre that also reduces carbon footprint.
- Protect IT Assets: build more resilient infrastructure that improves system availability and enables Disaster Recovery processes to be more effective.
- Support remote and home workers as organisations look to reduce property costs and improve quality of life for their employees.
- Gain agility through better application testing and quicker deployment of line of business applications.
- Ensure that the business can support higher levels of IT Governance and compliance.

So Server Virtualisation provides better utilisation of IT assets and breaks the link between the purchase of new hardware and the deployment of new IT solutions. Virtualisation is not a business strategy in itself but it is an enabler. Here are some of the areas that it can enable:

IT Consolidation: historically one physical server per application meant many servers, often under-utilised. Using virtualisation, it is possible to consolidate many physical servers onto one virtual server pool, the same applies for storage.

Application Development Testing: it is difficult to manage the downtime servers require for routine maintenance and software updates. Through virtualisation you can create dynamic test environments

for patch testing with no impact on daily operations and at a lower cost.

Disaster Recovery & High Availability: virtualisation enables an organisation to create a high availability or disaster recovery plan based on virtual machine environments.

Virtual Desktop Infrastructure (VDI): the desktop operating system is hosted on a virtual machine running on a centralised server. VDI provides end users with all the functionality of a standalone desktop plus features that increase security, decrease costs and provide high reliability.

Power: transitioning to a green Data Centre and optimising operating efficiency can be a complex undertaking. There are multiple components to factor into the equation—and best results can often be achieved by integrating improvements from multiple fronts. The good news is that there are many solutions and techniques available to support such a transition and Servo understands them all.

Consider this: the rising cost of a kilowatt of electricity has further compounded the problem. Cooling and electrical costs currently represent up to 44 percent of a Data Centre's total cost of ownership. According to The Uptime Institute: the three-year cost of powering and cooling servers is currently one-and-a-half times the cost of purchasing server hardware.

Poorly managed Virtual Infrastructure is still poorly managed infrastructure. With Server Virtualisation comes the ease to deploy applications quickly and easily. Remember that you will still be managing the same number of servers they will just be Virtual Servers. Add to that the fact that you are now laying multiple and sometimes different operating systems onto the same Hardware Layer can raise a number of security issues that the Industry can address but only if it is part of the process.

Customer Success Stories

Servo has helped many customers to virtualise their own environments or deploy virtualised solutions in our Hosting Centres. These customers include 2Plan, Gosschalks Solicitors, The University of Lincoln and Dumfries & Galloway College. Case studies are available from www.servo.co.uk. Here are some highlights:

2Plan

Servo combined its Virtual Shared Platform (VSP) Hosting Service with Server Virtualisation to help 2Plan achieve its objective of a fully redundant infrastructure that also offered outstanding IT agility:

“The technology lets you quickly add a virtual machine, drastically reducing the time taken to provision a new server and avoiding the cost of buying additional physical machines. In the past, an e-mail migration to a new server to get 1000 users up and running could have meant a week’s worth of work. With a virtualised solution, this can be achieved in an hour – or even less.”

Mark Smith,
IT Director, 2Plan

Gosschalks Solicitors

Virtualisation allowed Gosschalks Solicitors to reduce the volume of physical servers by a staggering 80%. Servo’s vendor independent approach was one of the positives:

“When I first met with Servo it became apparent that they would be able to provide me with whatever I needed, such was the depth of their knowledge on all matters discussed. I wasn’t limited to...[one]...choice of solution, it was down to me to listen to the wide range of options they made available to me and to decide which best suited our firm...”

Steve Savage,
IT Manager, Gosschalks Solicitors

The University of Lincoln

Servo helped the university to confirm the utilisation of the existing servers and the university found that this was only around 5%. As the solution developed it was clear that virtualisation offered the opportunity to take the 100+ existing servers and consolidate them onto eighteen new machines across two sites.

“The virtualisation project has allowed the IT

department to show the difference it can make helping the university to realise financial and service benefits in the first year of implementation. This project provides an excellent platform for the future.”

Ian Marshall,
ICT Infrastructure Manager, University of Lincoln

Dumfries & Galloway College

Servo and Dumfries & Galloway College settled on Microsoft’s Application Virtualisation system to provide applications to the desktop. This single decision enabled the College to move away from dedicated classrooms to flexible classroom provision and booking – a huge simplification saving time, cost and provides the students with a more varied experience.

Microsoft Application Virtualisation carries all of the advantages of centralised applications without the performance issues associated with ‘all across the wire’ solutions. It can help with applications that are unable to co-habit with other similar applications (such as some Java applications) and means that the College doesn’t need to test a large number of time consuming and expensive application combinations.

Your Next Step

If you are a Servo customer please ask your Account Manager to arrange a pre-consultancy engagement. If you are new to Servo please email info@servo.co.uk or call 0844 863 3000.

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