

Server Virtualisation

Simplifying and streamlining server ownership and management through virtualisation



ARROW ENTERPRISE COMPUTING SOLUTIONS

Most organisations have large numbers of servers spread across multiple locations and departments, each typically running a single application. This results in expensive duplication of resources, inefficiency, management complexity and unnecessary IT hardware and software spend.

The true cost of delivering server infrastructure to the business is almost impossible to estimate but undoubtedly it represents a substantial part of the IT budget. This is an area where potential savings and improved return on investment (ROI) can be significant.

Quick Pitch:

- Server virtualisation dramatically reduces the number of physical servers in an organisation by enabling multiple virtual servers to be run on a single or reduced number of shared machines. These are typically located in a centralised data centre facility, where the management, control and security of the server infrastructure can be more easily managed and supported.
- Each virtual server has its own operating system, applications will run as normal, and users have access via the network as usual. Multiple virtual servers are managed via a single management layer, or hypervisor.
- The number of servers can be reduced by a ratio of between 5 and 15:1, while the associated savings in hardware, licences, management, storage and particularly power consumption are enormous. ROI is extremely fast.

Ask your customer...	Tell your customer...
<ul style="list-style-type: none">• Do you have multiple individual servers each supporting a single application such as accounts, Exchange, web, mail...?	<ul style="list-style-type: none">• Server virtualisation offers the opportunity to adopt a more innovative approach to deploying and managing their servers.
<ul style="list-style-type: none">• Are you already running a primary data centre or considering consolidating and centralising your servers?	<ul style="list-style-type: none">• It will provide a strategic framework for consolidating, simplifying and centralising servers and other key IT resources.
<ul style="list-style-type: none">• How much expensive energy is being used to power and cool these servers - are you concerned about power availability and the price of electricity?	<ul style="list-style-type: none">• Power consumption and cooling will be dramatically reduced. These savings alone could cover the cost of deploying virtualisation.
<ul style="list-style-type: none">• How quickly can extra capacity be provided to meet business demand?	<ul style="list-style-type: none">• They will have more flexibility to roll out extra capacity and the ability to react more quickly to the demands of the business.
<ul style="list-style-type: none">• How hard do your servers work? Are processing power and storage capacity locked up on individual servers and going to waste?	<ul style="list-style-type: none">• It will substantially reduce the number of physical servers, thereby significantly improving utilisation per server and more efficient use of storage.
<ul style="list-style-type: none">• Who controls your servers: the central IT function or end-user departments? Will the launch of a service or branch generate a burst of new server activity? Are there new applications to be rolled out?	<ul style="list-style-type: none">• Centralising servers in a single location will enable them to target and deploy key IT skills more effectively and control standards across the organisation.
<ul style="list-style-type: none">• Should a machine go down, how fast and effective would disaster recovery be?	<ul style="list-style-type: none">• Business continuity processes and technologies will be easier to deploy, while virtual servers enable rapid fail-over in the event of a crash.

Arrow ECS is able to work with you to help your customers decide on the best way to implement server virtualisation and with our carefully selected products give your customers complete control over their IT infrastructure.

Summary of customer issues and the benefits of deploying server virtualisation

Your customers issues	Impact on their business	Benefits of deploying server virtualisation
They operate a rigid model of 'one application to one server', resulting in unnecessary sprawl and poor utilisation of resources.	Servers are not being used to the maximum - processing power lies idle and cannot be deployed on other applications. Software may be licensed per seat rather than by usage.	Virtualisation leads to significantly higher resource utilisation by sharing hardware and common infrastructure - everything is reduced, simplified and shared. Licences are provisioned for concurrent, not physical users.
Servers have proliferated across the business, often in remote hard-to-manage branches.	The server population and footprint are expanding. Physical infrastructure costs escalate without perceptible improvement in ROI.	Virtualisation cuts the number of servers and related IT hardware, reducing expensive space, power and cooling requirements - this significantly lowers IT costs.
Server management and support constantly demand more time and attention just to keep the infrastructure on an even keel.	IT administrators time is consumed by repetitive tasks such as provisioning, configuration, monitoring, maintenance and licensing.	Improved operational flexibility and responsiveness: virtualisation offers a new, streamlined way of managing IT infrastructure.
Isolated, stand-alone servers are vulnerable in the face of disaster or other unplanned outages.	At best, applications become frustratingly unavailable - at worst, business continuity is threatened.	Being able to securely backup and migrate entire virtual environments with no interruption in service eliminates planned downtime and enables quick recovery from unplanned outages.
Spend on power and utility costs are escalating and out of control. The power infrastructure in the data centre is struggling to cope with demand.	Utility and power spend is 'off balance sheet' but an increasingly expensive cost to the business which directly impacts the P&L. The business will come under increasing legislative and 'green' pressure to control this spiralling cost. Your customer may not be able to get enough power for the data centre at the current rate of expansion.	Reducing the number of physical servers directly reduces power and cooling consumption and related emissions. Businesses save hard cash and take control of their 'green' agenda.

Spot the sales opportunity

Who will benefit most from a server virtualisation solution?

Any medium to large organisation is set to benefit. In fact, thousands are already starting to deploy server virtualisation to simplify their infrastructure and reduce IT costs. By doing this they are increasing the efficiency, utilisation and flexibility of their existing computer hardware. Even those already running the majority of their servers within a centralised data centre will see the benefits, particularly those with servers in many different locations and branch offices.

There's a good chance someone in the organisation is already considering implementing a server virtualisation solution or at the very least exploring the concept. Virtualisation could be high on the agenda and businesses will spend budget on this because they will get a measurable return. This presents you with an excellent opportunity to add value.

Other considerations and related material

Implementing server virtualisation will impact other key areas of your customers' infrastructure, in particular their network, desktop, storage, security and applications, all of which can be virtualised and optimised to achieve similar benefits.

Considering and planning your strategy on these from the outset will ensure you select the most appropriate and compatible framework of virtualisation technologies to meet the specific requirements of your customers' business.

Look next at other related Arrow ECS solution briefs

- **Storage Virtualisation**
- **Desktop Virtualisation**
- **Network Virtualisation**
- **Application Virtualisation**
- **Security Virtualisation**

To access all our solution briefs and related material, please visit www.arrowecs.co.uk/virtualisation

For further information, please contact your Arrow ECS Account Manager on **0800 983 2525** or visit www.arrowecs.co.uk/virtualisation