

# Application Virtualisation

Simplified, cost-effective deployment of applications



ARROW ENTERPRISE COMPUTING SOLUTIONS

Application virtualisation separates applications from the devices and operating systems they run on and the resources they require. Applications become instantly accessible, simpler to manage and, ultimately, more stable.

Application virtualisation can take a number of forms, from those that relocate the application to a central server farm (known as 'server-based computing') to those that provide the application within a layer of virtualisation for local execution on a PC or laptop.

Application virtualisation delivers cost reduction by:

- Avoiding expensive hardware refreshes
- Eliminating costly application regression testing
- Reducing or removing deployment costs
- Simplifying application management

## Quick Pitch:

Centralised virtualised applications, run on servers inside the data centre, which can be locally managed, making best use of IT resources.

This model delivers LAN like speeds even for users on WAN or Internet links and requires only the installation of a simple piece of client software to access all corporate applications. Screenshots, keystrokes and mouse clicks are sent over the network, so end users feel as if applications are running locally.

This can extend the useful life of many desktop devices, and significantly reduces the environmental impact of power consumption, heat and noise for Windows based terminals.

Where network connectivity to the data centre is unavailable, local application virtualisation equips users with essential applications at the lowest possible cost. Applications no longer need to be installed on the workstation – users simply download and run them. The applications are combined with all the necessary components.

Furthermore, no files on the workstation will be altered, so unlike a conventional installation, there is no need to confirm that all previously installed applications still work.

Ask your customer...	Tell your customer...
<ul style="list-style-type: none"><li>• What is the current cost of rolling out and patching applications?</li></ul>	<ul style="list-style-type: none"><li>• Virtual applications have a much lower cost of delivery and roll out than installed applications.</li></ul>
<ul style="list-style-type: none"><li>• When rolling out a new application do you need to test your whole estate of applications for compatibility (regression testing)?</li></ul>	<ul style="list-style-type: none"><li>• With virtual applications, regression testing is massively reduced or even eliminated, because virtual applications cannot adversely affect installed applications.</li></ul>
<ul style="list-style-type: none"><li>• Do your remote offices and field based staff experience the same performance as those in headquarters?</li></ul>	<ul style="list-style-type: none"><li>• Centralised virtual applications give remote and field users the same performance as if within the data centre; only video images and inputs are copied over the wire.</li></ul>
<ul style="list-style-type: none"><li>• How do you provide secure remote access?</li></ul>	<ul style="list-style-type: none"><li>• If applications are delivered centrally from the data centre, data security cannot be breached by users copying files to their local hard drive, so the business retains full control of its data.</li></ul>
<ul style="list-style-type: none"><li>• How often do you perform a hardware refresh of your desktop estate?</li></ul>	<ul style="list-style-type: none"><li>• Centralised application virtualisation eliminates the need for high performance hardware at the user's desk. Older PCs can be employed as simple access points into the data centre.</li></ul>

Working with you, Arrow ECS can help your customers to decide on the best way to implement application virtualisation. With our carefully selected products, they'll gain complete control over their IT environments.

## Summary of customer issues and the benefits of deploying application virtualisation

Your customers' issues	Impact on their business	Benefits of deploying application virtualisation
They need to support applications on a range of different devices and operating systems.	Inefficient use of IT resources, multiple cycles of testing, high support costs.	Only the one environment needs to be tested and supported, which is the centralised server environment in which the applications execute.
Lack of business agility because applications take too long to roll out.	Inefficient use of IT spend, with unsatisfactory user experience.	Applications can be rolled out almost instantly – certainly much faster than if physically installed.
The IT team spends too much time installing and patching applications.	Valuable technical resources are diverted away from strategic responsibilities.	Installations are performed just once, centrally, while patching is simple and centralised.
Business and environmental pressures for flexible home-working.	Time wasted and expense incurred by employees commuting to different company locations.	Instant secure access to applications over the Internet, with a more flexible workforce.

While centralising IT resources has numerous benefits, it is not appropriate for all users, for example those without guaranteed network connectivity. For these users, the model of local application virtualisation is more effective. Off-line access is assured, while administrators still retain control of the applications and licences. The application virtualisation technique typically couples the applications with all the resources users need in a single module. There's no need for application installation or regression testing.

### Spot the sales opportunity

#### Who will benefit most from an application virtualisation solution?

Application virtualisation is an established technology platform, with over 180,000 organisations already delivering applications to their end users this way. Many of them use thin client terminals as a means of further reducing their operating expenditure. Their experience shows that businesses of any size can benefit from this technology.

Application virtualisation is closely related to desktop virtualisation and in many cases the two are combined as a single solution. Application virtualisation tends to have a lower cost of ownership, while desktop virtualisation can provide a more flexible computing environment.

The primary vendor of application virtualisation technology is Citrix, with its XenApp Application Delivery system. It's worth raising this with customers who have a significant investment in Citrix technology, to open up a wider discussion around their long-term virtualisation strategy.

#### Other considerations and related material

Implementing application virtualisation, as opposed to desktop virtualisation, is an important strategic choice. The decision will impact other key areas of the infrastructure, in particular network, server, storage and security provisioning, all of which can be virtualised and optimised to achieve similar benefits.

Considering and planning a strategy on these separate, but intrinsically related, areas from the outset will ensure you select the most appropriate and compatible framework of virtualisation technologies to meet the specific requirements of your customer's business.

Look next at other related Arrow ECS solution briefs...

- **Server Virtualisation**
- **Desktop Virtualisation**
- **Network Virtualisation**
- **Storage Virtualisation**
- **Security Virtualisation**

To access all our solution briefs and related material, please visit [www.arrowecs.co.uk/virtualisation](http://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](http://www.arrowecs.co.uk/virtualisation)