



threads

Sean Walsh, general manager, Australia and New Zealand, AppSense

There's nothing like your own desktop

Enforcing a one-size-fits-all virtual desktop is a sure-fire recipe for disaster, says **Sean Walsh**

The past two decades have been dominated by two means of delivering users their desktop environment. PCs, where there's a one-to-one relationship between user and machine, affords a highly flexible and personal experience for the user. But PCs are a relatively high cost asset, both in initial outlay and maintenance later on.

The alternative method of desktop delivery came with the advent of Microsoft Terminal Server and Citrix Winframe. This is a server-based computing approach, where a one-to-many relationship exists between machine and user. With multiple users sharing the same hardware resources, total cost of ownership is significantly reduced.

But this method suffers from low user acceptance, application conflict and performance issues. So adoption is limited to users who don't look for a highly flexible and personal working experience.

These two methods of desktop delivery remained the status quo for several years, until advances enabled the operating system to be abstracted from the hardware base. Called operating system virtualisation, this was pioneered at the server level by VMware in the late 1990s.

This enabled multiple servers to be supported on one physical box – for optimal use of hardware and increased business agility, since servers could now be “swapped out” almost instantly.

When applied to client computing, multiple desktops can be centrally hosted on a server and the accessing device swapped out for a low-cost presentation (thin) client. The difference between this and the traditional Terminal Server solution is that full desktops, operating system and application set included, can be hosted independently and be dedicated to one particular user.

There is no sharing of OS and applications and the application conflict issues which that model previously caused. This provides the one-to-one aspect of the PC, with the cost and management benefits of the one-to-many server-based computing model. This is called VDI (virtual desktop infrastructure) and is gaining momentum.

But something is missing – something that was not only present, but always intimately entwined in the PC and essential to user acceptance of the PC. We're talking of the user, the human being – in technological terms, the “user personality”.

These are the personal preferences of each user that makes their working environment their own. Desktop wallpaper, resolution settings, language, spell-checker, desktop icon location, personal applications etc are all optional changes that a user can – and is fully expecting to be able to – make to the baseline configuration of their desktop.

It's clear a third step is needed on the road to a fully realised virtual, on-demand desktop solution. A step that takes into account the most important component of the desktop as a business tool – the human being who interacts with it.

This third layer involves abstraction of the embedded user data with the desktop and managing it independently of the desktop environment. User environment management demands all aspects of the user personality to be abstracted, stored and managed separately from the desktop and applied on-demand when needed – in exactly the same way that OS and applications are assembled in the on-demand desktop.

In this way, the efficiency of the assembled desktop model can be realised with no impact to the users working experience.



All personal changes to the desktop by the user are also centrally stored independent of the desktop, to be applied next time the user requests a “fresh” working environment.

A PC, by its very definition, is typically managed by the user. When this environment is virtualised and centrally hosted in the datacentre however, the perceived ownership transfers to the business, specifically the IT department. This means implementation and enforcement of company policy becomes more important (and also more realistic) in virtualised environments.

Virtualisation technology has evolved to enable optimal use of available resources, increased business agility and reduced management overheads. But in all these technological advances, we must not lose focus of the most important component of the desktop – the user.

Attempting a virtualised desktop roll-out without embracing the management of user-specific aspects of the environment serves to omit an essential component of the desktop itself, providing only a sterile, unfamiliar experience.

Similarly, approaching the user aspect with partial solutions such as profile management or roaming profiles will increase the management overhead which virtualisation serves to decrease, as well as compromise the user experience since these piecemeal solutions are typically not enterprise and don't combine the policy and preference aspects of the holistic user personality.

User environment management is a key component in any move to a client-based virtual environment. It is the third layer of virtualisation and completes the vision of the on-demand desktop.

“It's clear a third step is needed on the road to a fully realised virtual, on-demand desktop solution”