



## Are the PC's days numbered?

### A CWL Systems White Paper

**To cut a long story short, we are now convinced that startling benefits are waiting for those organisations that adopt the latest ultra-thin client technology.**

*We think, for many organisations, the PC's days are numbered.*

Some people will say they've seen it all before; thin clients aren't new, and in earlier forms they didn't cut it. Yes, you could roll out thousands of dumb-screen equivalents and have them managed by a man and a dog, but they always required such trade-offs that they weren't welcomed by general end-user populations. The desire for the freedom promised by the PC, whatever the hidden cost of ownership, always seemed to trump the cost savings and improvements in manageability.

The situation has now changed. We believe that for many (probably most) organisations the benefits of thin-client computing are now both unassailable and achievable. We think that people thinking about upgrading their estates to Windows 7 should at least be considering a more radical, cost-effective step: moving to Sun Ray Ultra-Thin Clients. People that have no plans to upgrade their PCs should be planning for Sun Ray Ultra-Thin Clients too.

We believe:

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- ✓ Sun Ray Ultra-Thin Clients can now deliver **a better user experience than a desktop PC.**
- ✓ Sun Ray Ultra-Thin Clients can deliver **astounding cost savings** that will dwarf those delivered by the current wave of 'back-end' consolidation and virtualisation.

Grand claims, but claims we will explore.

## What's changed?

Well almost everything relevant to thin-client computing has changed for the better in the last few years. Lets look at some areas that could have been gating factors in the past.

**BANDWIDTH.** LANs are now typically fast and reliable. Smarter equipment and smarter configuration leads to fewer problems with broadcasts and collisions eating up available bandwidth. WAN costs have plummeted, and application acceleration technologies like WAAS mean that bandwidth is usable even when PC applications are chattering to each other. Network performance need no longer be a stopper for thin client deployment.

**CHIP PERFORMANCE.** Moore's Law has been quietly chugging away, delivering ever higher densities, ever cheaper processing and memory. Low cost, low power devices with large amounts of quiet, cool, reliable solid-state memory are now more than capable of providing outstanding performance for the people using them.

**SERVER RELIABILITY AND AVAILABILITY.** LANs and WANs may be more dependable, but so are the server infrastructures that use them. Virtualisation hasn't just revolutionised hardware utilisation: it's brought reliability and availability up to mainframe standards. Server infrastructures can now easily and cost-effectively deliver the capabilities demanded by thin client deployment for business.

**DEPLOYMENT OF WINDOWS APPLICATIONS.** Thousands of users of Citrix and similar technologies can attest that Microsoft Office and other Windows applications are easy to deploy and use on thin clients.

So the technical environment has changed, and made thin clients achievable. But why bother? What do we really get from migrating to the new environment? (Yes, migrating. This isn't a big bang, and in later articles we'll discuss the best approaches to introducing this technology without frightening the horses.)

## The promise for IT

Imagine the situation where any workstation related problem that can't be fixed remotely can be solved by the user picking up a new paperback-sized device from the stationery cupboard and plugging it in. No upgrades, no software refreshes, no support visits to desks at all. (And no expensive desk side support contracts either, which is why some vendors would rather not tell you about this stuff).

And they use about 4W, compared with about 80W for an average PC system unit. That's 95% less power, and a huge dent in the electricity bill.

No data, *none*, on the desk. *Everything* safe, backed up, recoverable.

Shared workstations become a usable, secure possibility for the first time since dumb screens, but now with all the rich applications of the PC. Users can switch in a couple of seconds.

Your cablers deploy your workstations.

You are so green people think you're a courgette!

## The promise for users

The cost case always looked good for thin clients, the problem was it was often offset by functional shortcomings. Those have gone, to be replaced by real-world functional benefits for people using them. People love the new environment. Here are a few for starters:

**SMART CARD AUTHENTICATION.** (If you want.) No more passwords on stickies, no shared passwords, no impersonation.

**LOG ON TO ANY WORKSTATION.** And you get your environment back, just as you left it, in less than a second. (And the right printers too.)

**NEVER WAIT FOR A PC TO BOOT EVER AGAIN.** Never leave a file or application behind when you visit another office.

**NO MORE DRONING FANS.** No more challenged air-conditioning.

**APPLICATIONS DELIVERED QUICKLY.** Because support doesn't have to get on their bike to come to see you.

**BE MORE SECURE:** Don't introduce viruses or trojans, and don't suffer from other people's.

**WORK AT HOME ON AN ULTRA-THIN CLIENT.** Use inbuilt VPN and securely access exactly the same applications and data as at the office, exactly as you left them when you pulled out the smart card and ran out the door.

**WORK WHEREVER YOU ARE.** Have the same environment on your laptop so you always have safe, secure, bullet-proof access to your corporate environment. Even if your daughter has been 'doing homework' on your laptop or you're having an exciting evening on the free Wi-Fi at the Travelodge.

## Benefits for the business

These benefits for IT and users all add up to huge benefits for the business in terms of IT agility and cost savings. Hence our interest. That's our mission. We now have a number of projects running using Sun Ray, and customers expecting significant savings from their deployment.

As a taster of what to expect, we're working with an NHS Trust deploying Sun Ray Ultra-Thin Clients. We caught them at the tail-end of their refresh cycle, but their business case is still startling. With Sun Ray they are doubling the size of their yearly refresh, and saving on third of their refresh budget at the same time. That includes the server infrastructure needed to power the devices. Thanks to Sun-Ray's longevity they are doubling their refresh interval too. This all adds up to an unassailable cost case for them.

## Filling in the gaps

We're going to use our blog <http://www.datavailability.co.uk> as a platform to report on these projects, but more importantly we'd like to use it as a vehicle for getting your feedback. We're convinced, a number of our customers are convinced, and we'd like to understand your feelings on the subject of ultra-thin clients. We'd like to understand the sort of facts and reassurance you'd need to consider them as part of your IT strategy.

We have papers and case studies planned. The papers will cover topics including systems management, migration techniques, managing remote users, and building the business case, but what we'd really like is to cover your issues. So if there are topics you'd like to see covered, or questions you'd like answering, please get in contact.

*So, tell us: what's stopping you from reaping the benefits of today's ultra-thin-client computing? Or if you are deploying them, perhaps you'd like to share your experiences? Get in touch on **0845 880 1285** or visit: [www.datavailability.co.uk](http://www.datavailability.co.uk) and leave a comment.*

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## About CWL

CWL Systems specialises in ensuring the availability of critical data. If you'd like to discuss any questions or concerns you have in these areas, or points raised in this paper please call us on **0845 880 1285** or visit [www.cwlsystems.co.uk](http://www.cwlsystems.co.uk).

