

Teradici-VMware alliance could change the face of graphics remoting

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Sector: Enterprise Software

Event summary

- A big constraint of server-hosted desktop virtualization remains the graphics-remoting protocol. Teradici's PC-over-IP (PCoIP) is good, even great, but right now it needs Teradici hardware at both ends. In 2009, VMware aims to offer PCoIP in software.
- A software PCoIP won't offer the same performance as its hardware equivalent, but it would give VMware a workaround for Microsoft's ubiquitous-but-pedestrian Remote Desktop Protocol (RDP). That could become an important differentiator for VMware.
- Software PCoIP allows Teradici to address ordinary desktop users, a market far bigger than its existing clientele – the workstation demographic, including computer-aided design (CAD) engineers, traders and media and entertainment creative staff.

The 451 take

It won't be easy to get Teradici's fast, elegant compression algorithms working as well in software as they do in hardware. But if VMware can pull it off – and who knows hardware emulation better than VMware does? – we expect Teradici's technology to become a hot property. The software and hardware elements should be interoperable, meaning that end-user organizations will be able to use the exact same remoting protocol for their high-end users who demand dedicated resources in the server room, and for the broad class of general knowledge workers connecting via zero client, integrated display or even laptop.

Details

Launched in 2004 in Vancouver, Canada, as a fabless semiconductor company, **Teradici** set its sights on the limitations of RDP – in retrospect, a prescient choice. Its PCoIP hardware has been in production since August 2007, and its early adopters are the traders and CAD engineers of the workstation demographic. Funding to date totals \$34m, with more to come, and the company has 85 employees.

In traditional hardware deployments, a Teradici setup involves a Teradici-enabled PC or workstation in the server room, communicating with the company's portal – a zero-software client a little like a **Pano Logic** cube, but supporting PCoIP instead of RDP – or a **Samsung** integrated desktop, which

is a monitor that includes the Teradici chip. PCoIP captures the output of the graphics card and compresses it at the pixel level, in effect extending the monitor cable to run between the server room and the physical desktop.

Reproducing this arrangement in software, with acceptable performance, is obviously going to be non-trivial. Nonetheless, **VMware** considers it an integral part of future releases of VMware View – necessarily so, since its competitors already have or are working on rich multimedia graphics remoting for server-hosted virtual desktops.

Competitive landscape

From VMware's point of view, the Teradici deal is a countermeasure against **Citrix Systems'** respected Independent Computing Architecture; **Microsoft's** upcoming RDP 7 with DirectX, multi-monitor and bidirectional audio support; and even **Red Hat's** SPICE, the jewel of its **Qumranet** acquisition. All three reflect the strategic importance of high-performance graphics-remoting capability to server-hosted desktop virtualization.

For Teradici itself, though, the biggest competitor is **Hewlett-Packard's** Remote Graphics Software. **Dell, IBM** and even Samsung are working with Teradici to add PCoIP support to their blade PCs, rack workstations and monitors, but HP remains the notable exception.

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