

22 June 2009

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Windows 7
Microsoft

[Windows 7 RTM Changes Disable DirectX Client-side Rendering over RDP 7](#)

Altogether

Changes implemented post-RC and ahead of the release to manufacturing deadline of [Windows 7](#) and Windows Server 2008 R2 have stripped away the DirectX client-side rendering over RDP 7 from the operating systems, Microsoft has informed. As Windows 7 progressed onward from Release Candidate to RTM modifications to the platform became less apparent. Microsoft did stress in the past that it would focus on under-the-hood optimizations and tweaks, but that the fabric of the OS would remain largely untouched. Still, at the end of the past week, the Redmond company announced that it had changed the way the gold version of Windows 7 and Windows Server 2008 R2 rendered content when remoted over RDP 7.

"In pre-release Windows 7 and Windows Server 2008 R2 we provided the ability to remote GDI, DirectX 10.1/DXGI 1.1, Direct2D, Aero Glass experience, and media with Windows Media Player using a client-based rendering technique. This has the advantage of utilizing available client side CPU/GPU resources to do all the rendering and rasterization of the graphical data," a member of the Terminal Services team [revealed](#). "Other content types, such as WPF, Silverlight, Flash, and DirectX 9 applications, were remoted using our enhanced bitmap acceleration feature in R2, where host-side CPU/GPU resources are utilized to perform the rendering and rasterization on the host before sending these bitmaps efficiently over the network."

Developers should expect Remote Desktop Protocol 7 to deal with remote content in a different manner in Windows 7 RTM and Windows Server 2008 R2. This is valid for both client and host. What the next versions of the Windows client and server platforms will keep unchanged in RTM compared to previous development milestones is client-side rendering associated with remote scenarios for GDI applications, but also for Windows Media Player content, and Aero Glass.

"For the RTM release, client-based rendering will no longer be available for DirectX 10.1 / DXGI 1.1 and Direct 2D applications, instead this type of content will be remoted using host-side resources leveraging the enhanced bitmap acceleration capabilities in R2. This decision was made based on the feedback we received during the engineering and validation process, where the number one requirement was quality and robustness. While this design change may impact the utilization of CPU and GPU resources on the host side for certain use cases, it provides a consistent approach to remoting multiple types of rich (2D and 3D) content across a broad range of rich and thin client devices," the Terminal Services team representative added.