

Desktop Virtualisation v. Thin Client Computing

Overcome the limitations of thin client computing with VirtuaCore™ computer sharing.



- » Save thousands of pounds annually with desktop virtualisation computer-sharing technology.
- » Turn one CPU into two or four fully functioning workstations.
- » Ideal in classrooms and education settings.
- » Not a thin client solution.

VirtuaCore Desktop Virtualisation Computer Sharing

Desktop virtualisation computer sharing has numerous advantages over thin client computing. VirtuaCore is just like using a PC, without any of the shortfalls of a thin client setup.

The weaknesses of thin client applications include:

- The lack of individual IP and MAC addresses. Without these, it's not possible to monitor each student's PC (required by law in some states). Additionally, this means standard remote classroom management software can't be used.
- Customisation for individual seats is impossible since thin clients have group policies.
- Without a high level of non-standard profile and security work, users can easily access and modify other user documents, without permission.



Six ways VirtuaCore is superior to thin clients:

1. VirtuaCore uses regular operating systems, such as Windows[®] 7, Windows Vista[®], or Windows XP, and VirtuaCore adheres to all security rules. Additionally, VirtuaCore benefits from Microsoft[®] volume licensing for virtual machine technology.

Thin clients, on the other hand, either use a modified — and therefore less secure — version of Windows XP. Or they use an operating system from Microsoft called MultiPoint, which adds up to £100 in costs per seat.

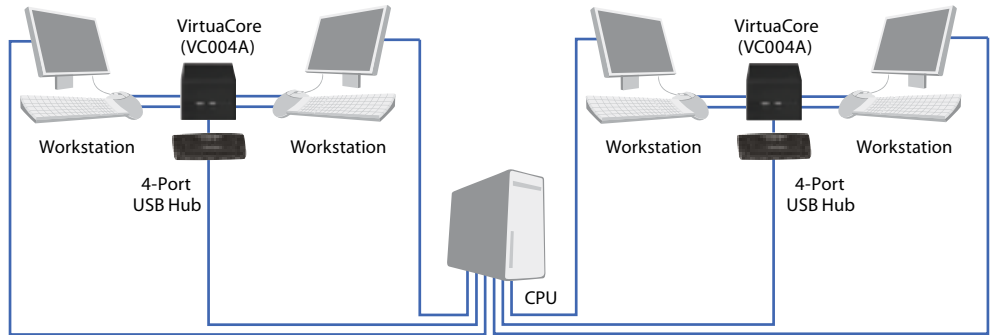
2. With VirtuaCore, individual applications are loaded onto each virtual machine, giving users access to each application at any time. Thin clients are constrained by using a single OS with single applications on one server. The latter setup has two disadvantages: If a user is in an application, no other user can open it. Second, in shared-user environments if one user is having an issue, such as slowdowns because of streaming video, every user is similarly affected. Because VirtuaCore is not a shared OS, this is not a problem.
3. VirtuaCore, just like a PC, is Active Directory aware. Each seat can be monitored because each seat has its own IP and MAC address. Plus, user data is secure because users may only access other user data with permission.

4. VirtuaCore uses native video connections and delivers seamless streaming video. The video is transferred at a rate of 21,600 MBps, so there are no performance shortfalls. Because of its native video connections, VirtuaCore avoids the use of TCP/IP, image downloads, buffering, and latency. Additionally, VirtuaCore is a software solution that doesn't require a remote processor at each seat.

Using TCP/IP, as thin clients do, limits video transmission because TCP/IP sends data in 32 KB packets. Each thin client seat uses a receiving device containing a processor, slowing transmission and adding costs.

5. VirtuaCore uses USB ports and devices. Plus, each user can use his/her own USB device at his/her seat, without giving others on the system access to the data.
6. VirtuaCore uses an ordinary PC with a dual-core or quad-core processor and user-friendly software. No server-class motherboards, no special software or hardware skills. VirtuaCore is far more cost-effective and easier to use than a thin client system.

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A zero client virtualisation computer-sharing system, such as Black Box's VirtuaCore, offers superior features to any thin client competitor, as demonstrated in the chart below.

	Zero Client (VirtuaCore)	Thin Client (Competitor N)
Each workstation has a unique MAC and IP address	Yes	No
Zero client—no processor, memory, or hard drive	Yes	No
Runs on native hardware—no image download	Yes	No
Simultaneous multi-operating system compatible	Yes	No
32-bit multimedia, streaming video, no latency	Yes	No
Multi-use USB and CD at every seat	Yes	No
Allows multiple instances of single-seat apps, including education software	Yes	No
Requires Microsoft Terminal Services server—software	No	Yes
Data transfer rate (minimum 132 MBps per user to achieve 30 fps)	21,600 MBps	480 MBps
Expandable to enterprise-wide installations	Yes	No
Hardware-agnostic images addresses #1 tech issue: cloning & image mgmt. time	Yes	No
Built-in software for Lock Workstation, Teacher Control, and Virtual CD	Yes	No
Easy to integrate with Active Directory or domain	Yes	No
Relies upon performance-limiting USB video cards or thin clients	No	Yes
Uses outdated PS2 connections (not USB)	No	Yes
Old thin client technology, requiring power for each seat (internal or external)	No	Yes
Requires high-end PC with server-class motherboard	No	Yes
Requires costly server software and special know-how	No	Yes
Software solution that only requires cables	Yes	No

VirtuaCore Desktop Virtualisation Computer Sharing

Make the cost-effective choice.

Don't pay to get more features — use the desktop virtualisation system with superior features and software capabilities.

VirtuaCore incorporates all the capabilities listed below into its purchase price, whether you buy one Cube or 100. Other virtualisation products charge more per seat to add these capabilities.

Product	Lock OS	Ability Clone	Auto Shutdown	Hardware-Agnostic Clone*	Class Mgmt.	Virtual CD	Linux [®] & Microsoft [®] Apps	Multiseat Capable	Approx Initial Cost per Seat	Approx Annual Cost per Seat
VirtuaCore	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	\$0
Acronis [®]	No	Yes	Yes	No	No	No	No	No	£28	£16
Norton [®] Ghost [™]	No	Yes	Yes	No	No	No	No	No	£23	£11
Altiris [™]	No	Yes	Yes	No	No	No	No	No	£25	£11
ScriptLogic	No	Yes	Yes	No	No	No	No	No	£28	£13
Deep Freeze	Yes	No	Add-on	No	No	No	No	No	£21	£11.50
Visual CASEL	Yes	No	No	No	No	No	No	No	£25	£18
Fortres Grand	Yes	No	Add-On	No	No	No	No	No	£21	£9
Vision [®] 6	No	No	No	No	Yes	No	No	No	Varies	Varies
NetSupport	No	No	No	No	Yes	No	No	No	Varies	Varies
SmartSync [™]	No	No	No	No	Yes	No	No	No	Varies	Varies
LanSchool	No	No	No	No	Yes	No	No	No	Varies	Varies