

Virtualize Your Budget

Triple the size of your classroom computer lab without increasing your technology budget.

A typical computer lab costs \$1,000 per seat or more. This high cost means most schools and even universities are only able to provide limited technology resources to their growing student population at a time when technology has become a part of everything we do and critical to academic success. What if you could:

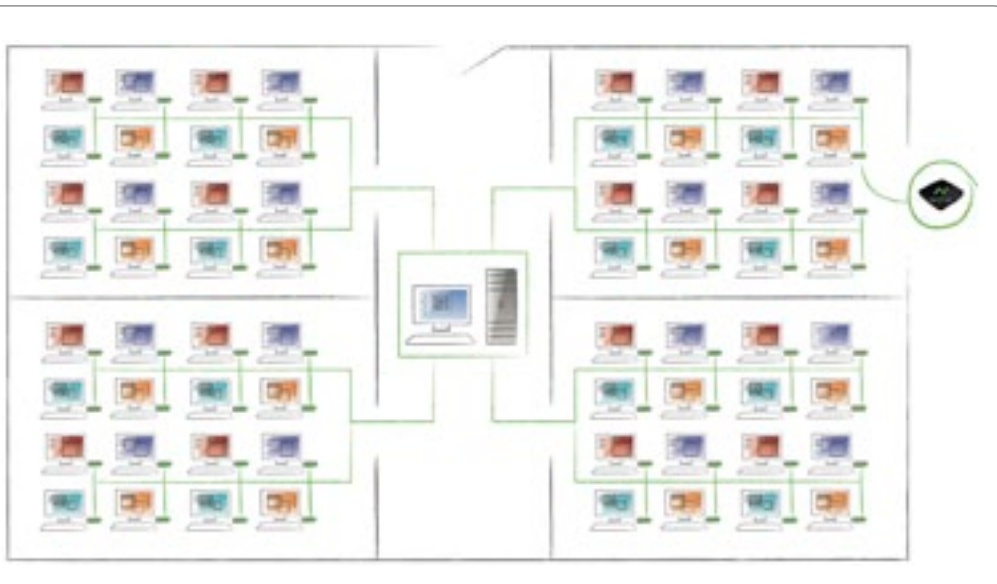
- Triple the size of the computer classroom without increasing your budget
- Reduce maintenance and support costs by 75%
- Reduce power and cooling requirements by 90%
- Reduce device theft and loss
- Build more flexible and smaller footprint labs, maximizing classroom space

The NComputing Classroom in a Box solution will enable you to provide better computer resources to more students at a lower cost at every level of education from k-12, community college to universities. The Classroom in a Box is ideal for classrooms, computer labs, testing centers, libraries as well as more extensive school district and higher education campus deployments.

Classroom in a Box

NComputing, along with its partners, has designed the Classroom in a Box solution, which combines the Ncomputing world-class desktop virtualization technology with products and services offered by our partners. Classroom in a Box is an all inclusive, pre-tested, easy to deploy solution that can be right-sized to your current needs and expanded in the future with modular add-ons. Classroom in a Box includes Host Server(s), vSpace™ Virtualization Software, OS licenses (as needed), NComputing virtual desktops and basic peripherals (monitors, keyboards and mice). Solution add-ons are available for larger deployments such as virtual desktop failover, storage, and server virtualization infrastructure for scaling to support large populations. Assessment and deployment services are also available through experienced NComputing partners. (See Table 1: CDW Classroom in a Box Guide)

Figure 1: Classroom in a Box Solution Architecture



Modular architecture allows Classroom in a Box Solution to scale to support multiple classrooms

CDW Corporation



CDW is a leading provider of technology solutions for business, government, education and healthcare.

Classroom in a Box Benefits

- **Modular Configurations**
Flexible configurations supporting up to 33 seats per host.
- **Lowest Cost Per Seat**
NComputing's award winning virtual desktop solutions reduce the per seat cost of a PC by more than 75%.
- **Turn-Key Solution**
The Classroom in a Box eliminates the complexities of desktop virtualization by making it very simple to deploy.
- **Pre-Tested & Validated**
All components of the Classroom in a Box have been pre-validated and tested to ensure the solution will work together.
- **Virtual Desktop Flexibility**
Depending on your needs, we offer workgroup or network connect virtual desktop solutions.
- **Protect your students**
Centrally manage internet filtering software at the server instead of each PC to ensure a consistent and safe internet experience
- **Small solution footprint**
Replace bulky servers with an access device that is the size of a deck of cards to free up valuable workspace in cramped classrooms and labs.
- **Green IT**
Build "green" computer networks that produce less e-waste and use less energy.

More About Desktop Virtualization

Server virtualization technologies have been used for years to simplify server infrastructure and reduce capital and operating expenses. Now, the same concept is being applied to end-user computing by virtualizing the desktop PCs of students, staff and faculty. The concept behind NComputing virtual desktops is simple: today's PCs and servers are so powerful that most organizations only use a small fraction of their power—the rest is wasted. The total cost of acquiring, managing, and replacing hundreds of desktop PCs (often thousands) is very high. That's where NComputing virtual desktops can help.

NComputing enables each end user to have their own computing session without having to dedicate a desktop PC at each user's desk. How? By virtualizing the session and hosting it on a shared host server. Depending on the configuration, a single PC-class machine can host up to 33 simultaneous users and a server can host hundreds of users.

By investing in a complete Classroom in a Box solution, you will be able to build out a complete virtualized classroom. All the components are pre-tested and configured to make deployments easy and reliable and pricing is offered at bundled discounts giving you the best value for your money.

Our customers' savings begin at the time of initial investment and continue throughout the life of their NComputing Classroom in a Box solution from reduced maintenance and energy costs. Contact your local partner and learn how you can virtualize your budget and deliver more computing resources to more students.

Table 1: CDW Classroom in a Box Configurations

The configurations below are base-level configurations that we have certified. Talk with your CDW representative if you would like to customize your configuration components or add-on services.

	Classroom (Workgroup)	Campus-wide (Network Connect)	District or Statewide (Network Connect)
Virtual Desktop	NComputing X550 Desktop Virtualization Kit	NComputing L300 Virtual Desktop	NComputing L300 Virtual Desktop
Host Server Options	Lenovo ThinkCentre M70e 0806 Acer Veriton M275-UD7600W - 4GB	Lenovo ThinkServer TS200v 0981 - Core i5 650 3.2 GHz • +6 GB of memory recommended Lenovo ThinkServer TD230 1029 - Xeon E5620 2.4 GHz • +4 GB of memory recommended	Lenovo ThinkServer TS200v 0981 - Core i5 650 3.2 GHz • +6 GB of memory recommended Lenovo ThinkServer TD230 1029 - Xeon E5620 2.4 GHz • +4 GB of memory recommended
Peripherals	Adesso Desktop Multimedia Keyboard Logitech Optical Wheel Mouse SBF-96	Kensington ValuMouse Optical Kensington Keyboard For Life Logitech Media Combo MK200 - KB+Mouse	Kensington ValuMouse Optical Kensington Keyboard For Life Logitech Media Combo MK200 - KB+Mouse
Monitors	Acer G195WAB 19" Wide LCD ViewSonic VA705B 17" LCD	Acer G195WAB 19" Wide LCD ViewSonic VA705B 17" LCD	Acer G195WAB 19" Wide LCD ViewSonic VA705B 17" LCD
Operating System (optional)	Windows Server 2008 R2 Standard Open Academic License (1 per host) Windows Server CAL Open Academic (1 per station) Remote Desktop Services CAL Academic (1 per station)	Windows Server 2008 R2 Standard Open Academic License (1 per host) Windows Server CAL Open Academic (1 per station) Remote Desktop Services CAL Academic (1 per station)	Windows Server 2008 R2 Standard Open Academic License (1 per host) Windows Server CAL Open Academic (1 per station) Remote Desktop Services CAL Academic (1 per station)
NAS Server (optional)	Buffalo TeraStation Duo TS-WX2.0TL/R1	Buffalo TeraStation Duo TS-WX2.0TL/R1	Buffalo TeraStation Duo TS-WX2.0TL/R1
Server Virtualization Software		VMware vSphere Hypervisor (ESXi) Citrix XenServer Microsoft HyperV	VMware vSphere Hypervisor (ESXi) Citrix XenServer Microsoft HyperV

Customer Benefits

Republic of Macedonia

- Nationwide deployment
- Over 400 schools brought online serving over 200,000 students

Andhra Pradesh, India

- Statewide deployment
- Providing over 1.8 million students with computing access

Ramona Unified School District

- District-wide deployment
- Cut deployment cost in half and deployed a single classroom in 1 day

University of Lisbon, Dental School

- Campus-wide deployment
- Reduced need for IT support by 90%, realized 75% savings in electricity and increased desk space by 90%