

## Making It Easier to Share

*NComputing's Classroom in a Box solution, combines the power of desktop virtualization with the rich experience of Windows MultiPoint Server*

A typical computer lab can cost \$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 while also providing every student with their own independent Windows experience?

The NComputing Classroom in a Box solution, powered with Windows MultiPoint Server 2011, will enable you to provide better computer resources to more students at a lower cost at every level of education from K-12, to community colleges to universities. The Classroom in a Box solution is ideal for classrooms, computer labs, testing centers and libraries as well as more extensive campus deployments.

### Classroom in a Box

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 NComputing virtual desktops, vSpace™ desktop virtualization software, Windows MultiPoint Server 2011, host computer(s) 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 and Microsoft partners. (See Table 1 below)

**Table 1: Classroom in a Box Powered by Windows MultiPoint Server 2011 Configuration Guide**

Solution Components	Single Classroom (Workgroup)	Campus (Network Connect)
Simultaneous Users	Up to 20	Over 20
NComputing Virtual Desktop	X550 L300	L300
NComputing vSpace Software	•	•
OS Licenses	Windows MultiPoint Server 2011	Windows MultiPoint Server 2011 (for up to 20 users per physical or virtual machine)
Client Access Licenses	MultiPoint Server 2011 CAL Windows Server 2008 CAL	MultiPoint Server 2011 CAL Windows Server 2008 CAL
Host Computer(s)	PC Class Hardware	PC or Server Class Hardware physical or virtual host
Basic Peripherals	Monitor, Keyboard, Mouse	Monitor, Keyboard, Mouse
Desktop Failover +		•
File Storage +	Internal Storage / NAS	NAS or SAN
Server Virtualization		Microsoft Hyper-V Server  Windows Server 2008R2 with Hyper-V Role, Standard, Enterprise or DataCenter
Data Back-up +	•	•
Assessment Service +	Optional	Recommended
Deployment Service +	Optional	Recommended



### Classroom in a Box Delivers Tangible Benefits!

#### More Computing At Lower Total Cost

- Reduce the per seat acquisition cost of a PC by more than 75%
- Reduce maintenance and support costs by 75%
- Reduce power and cooling requirements by 90%
- Support up to 20 seats per host when deployed on Windows MultiPoint Server 2011

#### Engaged Students, Empowered Educators

- Extend access to Windows applications to more students, at lower cost
- Same familiar Windows experience eliminates need to retrain teachers and students
- Easily broadcast files, videos and more
- Install an application once and see it appear automatically on all user stations
- Create, manage and orchestrate student accounts

#### Best Virtual Desktop Technology

- Highest user density per dollar compared to any thin client vendor
- Most energy efficient device using 1-5 watts compared to other thin clients that require 6-20 watts
- Lowest e-waste at just .34 lbs per device compared to 3 lbs per device of other thin client vendors
- Robust graphics including rich, hardware-accelerated full-motion, full-screen video playback without the need for expensive graphics cards at the server or client.
- Fastest and easiest deployment time compared to other thin clients – deploys in minutes

## More About Desktop Virtualization & Shared Computing

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 and Windows MultiPoint Server 2011 can help, enabling each end user to have their own computing session without having to dedicate a desktop PC at each user's desk by virtualizing the session and hosting it on a shared host server.

NComputing, delivers the highest user density per dollar and is the fastest growing desktop virtualization company in the world with over 20 million daily users in 140 countries. The company's award-winning, patented technology offers the lowest cost desktop virtualization, improves manageability, and significantly reduces both energy consumption and e-waste for organizations. NComputing is the perfect solution for unlocking the power and potential of PCs and cloud computing for any size deployment.

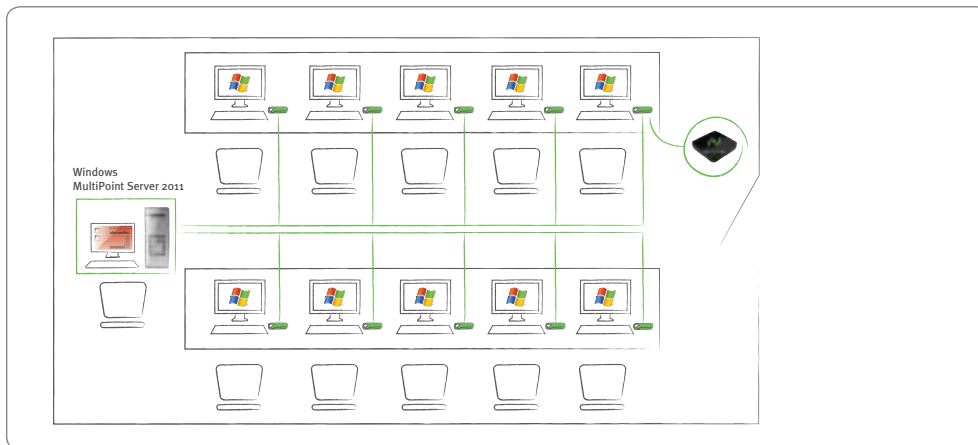
With Classroom in a Box powered by Windows MultiPoint Server 2011, users also get the familiar Windows environment. Windows MultiPoint Server 2011 is a new Windows product that allows multiple users to simultaneously share one computer, while providing each with an individual computing experience. Its interface is based upon Windows 7, so users can not only use familiar features like folders, Internet Explorer and Windows Search, but they can take advantage of some of the latest ones like "Snap" that improve navigation and focus managing multiple Windows. New features have also been added to make it easier for teachers to add new student accounts as well as manage, monitor and orchestrate the student experience ensuring a safe and productive learning experience. Multi-media capabilities have been enhanced so that teachers can easily broadcast files, videos or their own desktop, enabling them to engage their students and captivate their imaginations, all while keeping them focused and on task.

By investing in a complete Classroom in a Box solution powered by Windows MultiPoint Server 2011, you will be able to build out a complete, virtualized classroom at a lower cost. Learn how you can share more computing resources with more students to create a dynamic learning environment at [www.ncomputing.com/wms](http://www.ncomputing.com/wms).

"The creation of shared resource computing solutions like NComputing's using Windows MultiPoint server will provide even more policymakers, teachers, and students with access to affordable, security-enhanced and easy to use technology."

Guy Seltzer  
Network Administrator  
Moraga School District

Figure 1: Classroom in a Box Solution Architecture



**Microsoft**  
GOLD CERTIFIED

Partner