



Waterford System Requirements

Server Configurations (v3 and v4)
Peer-to-Peer (v3)
Centralized School Manager (v3)

Overview

This document lists the system requirements that Pearson has determined will deliver acceptable operation and performance in a majority of cases. Although based on current hardware and software technologies, your actual performance may vary due to different configurations, including server application loading, available network bandwidth, client security configuration, number of concurrent users, courseware usage, and other variables.

These specifications were developed in an environment free from network congestion, resource contention, and aggressive security measures. They are intended strictly as a guideline.

The minimum requirements should be considered applicable only if your workstations use a minimally configured, supported operating system, a minimally configured virus scanner, and the Pearson application **ONLY**.

Due to the rapid advances and changes in technology, as well as future product enhancements, system requirements are subject to change. If you have questions regarding the suitability of your specific computing environment, please direct them to your Pearson Sales representative or Technical Specialist.

	Server	Teacher Station	Client/Student Station	Network Minimum	Serves:
<u>Version 4.x</u>	Content database	NA	Access Point	100 Mb*	Up to 200 stations <i>(with multiple servers)</i>
<u>Media Server 3.15</u>	Content database	NA	Access Point	100 Mb*	Up to 35 stations per server
<u>Peer-to-Peer Model 3.14.5</u> <i>(classroom or lab)</i>	NA	Content Database	Content	NA	Up to 30 stations
<u>Centralized School Manager (CSM)</u>	Database	NA	Content	10 mb	Up to 100 stations

Operating Systems: Microsoft® Windows® 2000, XP Pro, Vista Business or Server 2003

*If a customer does not meet the networking requirements of a 100 Mbps network, a server deployment could still be executed. The configuration would include networking cables connected directly from station(s) to a managed switch to the server as a self-contained network.

Version 4.x

(Up to 200 client stations when running multiple servers)

Classroom Model

(6 stations total - 5 clients plus the server)

	Server Station		Client Station	
		PC		*Mac®
Processor	Pentium 4 2.4 GHz	Pentium III 800 MHz	1.25 GHz	
Memory	**2 GB	512 MB	512 MB	
Hard Drive	120 GB SATA	1 GB available	1 GB available	
Operating System	Windows 2000 or XP Pro	Windows 2000, XP Pro or Vista Business	OS X.4.11® (Tiger)	
NIC	One 100 Mbps	One 100 Mbps	One 100 Mbps	
Network	Workgroup switch			
Audio	SoundBlaster or AC '97 compatible	SoundBlaster or AC '97 compatible	SoundBlaster or AC '97 compatible	

*Up to 5 Mac clients can run in a Classroom Model implementation. However, the server station must be a PC running Windows 2000 or XP Pro with Windows Services for Unix (NFS) installed. Windows Services for Unix is available as a free download from Microsoft.

**Only 1 GB of memory is required if running 4 stations or less (3 clients plus the server).

Lab and Distributed Model** - Dell 2900/2950 or like configuration

(Recommended specifications; 70 client stations per server)

	Server		Client Station	
		PC		Mac
Processor	*Two 2.4 GHz Intel Xeon	Pentium III 800 MHz	1.25 GHz	
Memory	2 GB	512 MB	512 MB	
Hard Drive	Four 73 GB SCSI drives in RAID 10 Array	1 GB available	1 GB available	
Software	Windows Server 2003 R2 Microsoft SQL Server 2000 or 2005	Windows 2000, XP Pro or Vista Business	OS X.4.11 (Tiger)	
NIC	Four 100 Mbps or one 1 Gbps	One 100 Mbps	One 100 Mbps	
Network	Managed switch	Maximum 5 clients per 100 Mbps drop	Maximum 5 clients per 100 Mbps drop	
CALs	N/A	2 per client station, one for SQL one for OS	2 per client station, one for SQL one for OS	
RAID Card	Dual channel SCSI RAID controller with 256 MB DDR RAM	None required	None required	

*Waterford is not designed to take advantage of multi-core processors. For this reason, two separate processors are required.

**Can also be deployed in a MAN environment.

Lab and Distributed Model

(Minimum specifications; 35 client stations per server)

	Server	Client Station	
		PC	Mac
Processor	*Two 2.4 GHz Intel Xeon	Pentium III 800 MHz	1.25 GHz
Memory	2 GB	512 MB	512 MB
Hard Drive	Four 37 GB SCSI drives in RAID 5 Array	1 GB available	1 GB available
Software	Windows Server 2003 R2® Microsoft SQL Server 2000 or 2005	Windows 2000, XP Pro or Vista Business	OS X.4.11 (Tiger)
NIC	Four 100 Mbps or one 1 Gbps	One 100 Mbps	One 100 Mbps
Network	Managed switch	Maximum 5 clients per 100 Mbps drop	Maximum 5 clients per 100 Mbps drop
CALs	N/A	2 per client station, one for SQL one for OS	2 per client station, one for SQL one for OS
RAID Card	Dual channel SCSI RAID controller with 256 MB DDR RAM	None required	None required

*Waterford is not designed to take advantage of multi-core processors. For this reason, two separate processors are required.

Media Server 3.15

(Up to 35 client stations)

Classroom Model

(6 stations total - 5 clients plus the server)

	Server Station	Client Station
Processor Speed	Pentium 4 2.4 GHz	Pentium III 733 MHz
Memory	1 GB RAM	256 MB RAM
Hard Drive	120 GB SATA	1 GB available
Operating System	Windows 2000 or XP Pro	Windows 2000 or XP Pro
NIC	100 Mbps	One 100 Mbps
Network	Workgroup switch	
Audio	SoundBlaster or AC '97 compatible	SoundBlaster or AC '97 compatible

Lab and Distributed Models

(up to 35 client stations per server)

	Server	Client Station
Processor Speed	*Two 2.4 GHz Intel Xeon	Pentium III 733 MHz
Memory	1 GB RAM	256 MB RAM
Hard Drive	Four 37 GB drives in RAID 5 Array	1 GB available
Operating System	Windows Server 2003	Windows 2000 Pro or XP Pro
NIC	Four 100 Mbps or One 1 Gbps	One 100 Mbps
Network	Managed switch	Maximum 5 clients per 100 Mb drop
CALs	None required	2 per client station, one for SQL one for OS
Audio	None required	SoundBlaster or AC '97 compatible
Additional required software	Microsoft SQL Server 2000	None required

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Peer-to-Peer Model 3.14.5

(Up to 30 stations)

	Minimum	Recommended
Processor Speed	Pentium [®] III 733 MHz	Pentium 4 2.4 GHz
Memory	256 MB RAM	512 MB RAM
Hard Drive	80 GB Available	120 GB Available
Operating System	Windows 2000 [®] or XP Pro [®]	
NIC	One 100 Mbps	One 100 Mbps
Audio	SoundBlaster [®] or AC '97 [®] compatible	
Additional required software	For lab models: Windows 2000 Server [™] Microsoft SQL Server 2000 [™] Client access licenses (CALs) for additional software access	

Centralized School Manager (CSM) 3.14.5

(Up to 100 client stations)

	Server		Client Station	
	Minimum		Minimum	Recommended
Processor Speed	Pentium 4 2 GHz		Pentium III 733 MHz	1.6 GHz
Memory	1 GB RAM		256 MB	512 MB
Hard Drive	120 GB		120 GB	120 GB
Operating System	Windows 2000 Server		Windows 2000 or XP Pro	Windows 2000 or XP Pro
NIC	One 100 Mbps		One 100 Mbps	One 100 Mbps
CALs	None required		2 per client station, one for SQL one for OS	2 per client station, one for SQL one for OS
Audio	None required if not using as a client station		SoundBlaster or AC '97 compatible	SoundBlaster or AC '97 compatible
Additional required software	Microsoft SQL Server 2000™		None required	None required

Peripheral Recommendations for All Versions

We recommend quality peripherals to maximize the Waterford experience.

Deployment Model	Order one per:	Includes:
All	Station	1 Telex® headset body DS-EV with volume control & boom microphone* 2 Telex® headset wire-model DS-EV 20.140" stereo 2 mousepads 1 keyboard cover 1 RJ-45 network cable
All	Classroom	2 surge protectors <i>for networked set of 3 stations</i> 1 camera 1 set of speakers 1 Y jack

*Some Mac stations only accept USB headphones. The Telex headsets will need an additional USB converter in order to work with these sites or a different headphone that is USB based.