



**Client-Hosted PLATO® Web Learning Network  
Version 5.1  
System and Configuration Requirements**

Aug 1, 2009

- Windows® Vista SP2
- Windows® XP Professional SP3
- Windows® XP Home Edition SP3
- Windows® 2000 Professional with SP4
- Mac® OS 10.4 and 10.5

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## About this document

*Disclaimer: The system requirements provided by PLATO Learning are intended to be a guideline based on current hardware and software technologies. Your actual performance may vary due to specific site software configuration parameters and other software you may be running. Due to advances and changes in these technologies, system requirements are subject to change without notice.*

This document provides guidance to PLATO Learning customers about the environmental specifications for Client-Hosted PLATO® Web Learning Network.

In general, most user experience in an internet browser is with standard HTML web pages, which use simple text and graphics that do not consume much bandwidth. PLATO Learning, Inc. has gone beyond HTML to provide much higher production values; therefore, the system requirements for CHPWLN and PLATO® courseware are higher than if you were simply browsing HTML web pages.

In addition, many other factors can affect your CHPWLN performance, including the following:

- Proxy servers and caching
- Firewalls
- Hubs and switches
- Available bandwidth of your local network
- General database / Microsoft® SQL Server 2000 knowledge and experience

All of these factors interact with each other and can impact performance. Any combination of these variables may affect your Client Hosted PLATO Web Learning Network performance.

If you need help to make sure your system is ready to run PLATO® software, PLATO Learning offers onsite, fee-based consulting services for your needs. When you use PLATO Learning's consulting services, our trained technical staff will work with your technical department to troubleshoot and remedy problems if they are encountered after the initial installation.

To find out more about PLATO Learning's fee-based consulting services, call 1-800-44-PLATO or e-mail [info@plato.com](mailto:info@plato.com).

## Document Change Log

The following table lists the most recent changes to Client-Hosted PLATO® Web Learning Network System and Configuration requirements:

Date	Updates
8/26/09	<ul style="list-style-type: none"> <li>Removed support for Internet Explorer 8.0</li> </ul>
7/31/09	<ul style="list-style-type: none"> <li>Added support for Internet Explorer 8.0</li> <li>Updated Vista service pack requirements to SP2</li> <li>Updated Vista memory requirements</li> <li>Updated XP Pro and Home service pack requirements to SP3</li> <li>Updated Connection Speed section</li> <li>Updated Safari requirements to 3.2.x</li> <li>Update Mac OS 10.5 memory requirements</li> </ul>
10/27/08	<ul style="list-style-type: none"> <li>Update Mac OS X requirements to 10.4.11 from 10.4.10</li> <li>Updated Safari requirements to 3.x.x</li> </ul>
06/04/08	<ul style="list-style-type: none"> <li>Removed Support for Mac OS 10.3</li> </ul>
03/06/08	<ul style="list-style-type: none"> <li>Updated Processor Speed minimum from 500MHz to 1 GHz</li> <li>Updated Processor Speed for Macs to PowerPC or Intel</li> <li>Added Support for Microsoft® SQL Server 2005 with Service Pack 2 installed</li> <li>Paradox is not supported for version 5.1</li> <li>Removed support for Mac OS 10.2</li> <li>Removed support for Netscape®</li> <li>Updated minimum Memory requirement from 256 MB to 512 MB</li> <li>Removed support for virtual computing platforms</li> </ul>
11/29/07	<ul style="list-style-type: none"> <li>Added support for Mac® OSX 10.5 with Safari® 3.0.3</li> <li>Updated supported Mac® operating system 10.4.10 with Safari® 2.0.4</li> <li>Discontinued support for PLATO® Learning, Inc. products running on platforms with Mac® operating system 10.1</li> <li>Updated Internet Connection Speed to a minimum of 128kbps per workstation</li> </ul>
04/30/07	<ul style="list-style-type: none"> <li>Added support for Windows® Vista operating system, effective March 15, 2007.</li> </ul>
04/02/07	<ul style="list-style-type: none"> <li>Added support for Internet® Explorer 7 for Windows® XP and Windows® 2000 Operating Systems.</li> </ul>
03/28/07	<ul style="list-style-type: none"> <li>Changed the minimum supported version of Adobe® Reader from 6.0.1 to 7.0.</li> </ul>
01/10/07	<ul style="list-style-type: none"> <li>Discontinued support for PLATO® Learning, Inc. products running on platforms with Windows® Millennium (ME) and Windows® 98 Second Edition. End of support date: December 31, 2006.</li> </ul>
11/29/06	<ul style="list-style-type: none"> <li>Replaced instances of Corel® Paradox Database with Microsoft® SQL Express.</li> </ul>
10/19/06	<ul style="list-style-type: none"> <li>Removed pre-installation checklist from document.</li> </ul>
06/27/06	<ul style="list-style-type: none"> <li>Updated supported Mac® operating systems to 10.1, 10.2, 10.3.9 with Safari® 1.3.2, and 10.4.6 with Safari® 2.0.3</li> </ul>

06/22/06	<ul style="list-style-type: none"><li>Updating system requirements to state that PLATO Learning does not currently support Windows® 2003 Pro x64 (64-bit edition)</li></ul>
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## Document Change Log, continued

03/21/06	<ul style="list-style-type: none"><li>Removed open UK ports requirement.</li><li>Mac® OS 9.x is no longer a support operating system.</li></ul>
09/12/05	<ul style="list-style-type: none"><li>Added Mac® OS 10.4.2 support with Safari® 2.0.1</li></ul>
05/25/05	<ul style="list-style-type: none"><li>Removed open port 443 requirement.</li><li>Added port for firewall support.</li><li>Added support for Windows XP SP2.</li><li>Added ability to configure pop-up blockers instead of disabling them.</li><li>Changed requirement for large systems to call Technical Support for sizing recommendations above 500 users.</li><li>Modified configuration of proxy server.</li><li>Modified server configuration requirement.</li><li>Netscape® 8 is not supported at this time.</li><li>Mac® OS 10.3.9 and Safari 1.3 is not supported at this time.</li><li>Mac OS 10.4 and Safari is not supported at this time.</li><li>.</li></ul>
04/08/05	<ul style="list-style-type: none"><li>Updated minimum bandwidth requirements from 30 kbps to 40 kbps.</li></ul>
04/01/05	<ul style="list-style-type: none"><li>Updated Mac processor, OS, and Browser requirements.</li></ul>
03/16/05	<ul style="list-style-type: none"><li>Removed requirements for Mac users.</li><li>Updated Support site and Request form URLs.</li></ul>
09/01/04	<ul style="list-style-type: none"><li>Added Netscape® 7.0 as a supported browser for Mac OS 9.2.</li><li>Increased memory requirement for Mac OS 9.2 from 128 MB to 256 MB.</li><li>Changed memory allocation to browser from 40 MB to 60 MB.</li><li>Added announcement that Service Pack 2 for Windows XP is not supported; it is currently being tested.</li></ul>
03/17/04	<ul style="list-style-type: none"><li>Added requirement to disable pop-up blockers on workstations.</li><li>Added Adobe® Reader 6.0.1 requirement.</li></ul>

# Technical Environment & Knowledge Requirements For All Server Configurations

## Your Site's Responsibilities

Your site's Information Technology (IT) Department or network administrator is responsible for the day-to-day support and maintenance of the network system and all network security per your site's security policies.

Client-Hosted PLATO Web Learning Network can be accessed by remote users over the Internet. If your site chooses to provide this capability, your site is responsible for all security, firewall, and intrusion protection for your server. PLATO Learning assumes no responsibility for unauthorized access to the CHPWLN system or your network.

## Knowledge Requirements

We strongly recommend that you have a Microsoft® Certified Systems Engineer (MCSE) or technician with equivalent knowledge and experience on site.

- Your MCSE or technician must have a thorough understanding of Microsoft® Windows Server operating systems with a specific emphasis on Microsoft® Internet Information Services (IIS)
- Your MCSE or technician must have the knowledge, training, and experience to administer MS SQL databases
- Your MCSE or technician must have a thorough understanding of Internet communications, security principles, and data center operations

## Site Preparation Requirements

Prior to installation, a technical contact person at your site must confirm with PLATO Learning, Inc. that your site's network is configured and updated as required and documented by PLATO Learning, Inc.

Your site must also comply with the security and port settings required by CHPWLN.

## Quick Configuration Summary

Client-Hosted PLATO® Web Learning Network is available in various configurations to meet your needs. The file server and network system requirements depend on the number of workstations you will have *simultaneously* connected to CHPWLN, and on how the components of CHPWLN are distributed on each of the servers.

Virtual computing platforms--including but not limited to Thin Client, NComputing, Citrix, and others--are not supported by PLATO Learning. Use of any virtual computing platform while using PLATO Learning products may produce unpredictable results. PLATO® Support is unable to answer questions or provide guidance for PLATO Learning products running on these platforms.

Number of Workstations	Network Characteristics	Client File Servers	Appendix
<b>Up to 100 simultaneous PC and/or Mac connections</b>	<ul style="list-style-type: none"> <li>100 MBps LAN</li> </ul>	<ul style="list-style-type: none"> <li>One dual processor server running all components</li> <li>Microsoft® SQL Express</li> </ul>	<b>A page 10</b>
<b>Up to 249 simultaneous PC and/or Mac connections</b>	<ul style="list-style-type: none"> <li>100 MBps LAN</li> </ul>	Two dual processor servers: <ul style="list-style-type: none"> <li>1 Microsoft® SQL Server 2000 or 2005 database server</li> <li>1 web server running IIS 5.0 or 6.0</li> </ul>	<b>B page 11-12</b>
<b>For up to 499 simultaneous PC and/or Mac connections</b>	<ul style="list-style-type: none"> <li>100 MBps LAN</li> </ul>	Add one dual processor web server running IIS 5.0 or 6.0	<b>C, D pages 13-15</b>
<b>For each 500 simultaneous PC and/or Mac connections</b>	<ul style="list-style-type: none"> <li>100 MBps LAN</li> </ul>	Add one dual processor Microsoft SQL Server 2000 or 2005 database server	<b>C, D pages 13-15</b>

## File Server & Network System Requirements

For detailed system requirements, please see the appendix that applies to your situation:

Number of Simultaneous Connections	Appendix	Pages
Up to 100 simultaneous PC and/or Mac connections	A	10
Up to 249 simultaneous PC and/or Mac connections	B	11-12
Up to 499 simultaneous PC and/or Mac connections	C	13-15

After reviewing your file server and network system requirements, continue with these requirements on the following pages:

1. Network configuration requirements (page 3)
2. Workstation system requirements (pages 5-6 )
3. Workstation configuration requirements (pages 7-9)

## Network Configuration Requirements

### Open Ports

If you access Client-Hosted PLATO® Web Learning Network from behind a firewall, or have otherwise limited port access to the CHPWLN servers, you must open the following ports for network data traffic. If you use a proxy server, you must make sure these ports are open at the proxy server. You will not be able to access CHPWLN or run PLATO courseware if the following ports are not open:

<b>Port 80</b>	Standard HTTP port for web page access
<b>Ports 1209</b>	Port 1209 must be open to TCP outbound
<b>NOTE:</b> If you have a firewall between your SQL server and web server, you may also need to open ports 747, 3285, 3284, and 1433. Contact PLATO Support Services for further assistance (800-869-2200).	

In addition, you should make sure that none of your security devices are set to automatically disconnect a user session prematurely. PLATO Learning suggests that you do not set any disconnect settings for less than 30 minutes.

## Connection Speed to CHPWLN Servers

PLATO Web Learning network requires a connection to the CHPWLN servers with a *minimum connection speed*, depending on the courseware you are running. Many factors can affect your actual connection speed. Improperly configured network settings on the LAN or on workstations, using low bandwidth hubs instead of switches and actual throughput can adversely affect performance.

Your actual available network bandwidth depends on the number of simultaneous users, the specific courseware you are using, and overhead produced by other applications running on the network. In general, PLATO recommends the following bandwidth:

- PLATO® Straight Curve® Courseware – 128Kbps per *simultaneous* workstation
- PLATO® Life Science, Physical Science, and Earth and Space Science Courseware – 128Kbps per *simultaneous* workstation
- All other PLATO® Courseware requires 40Kbps per *simultaneous* workstation

## Filtering Software

We also recommend that you do not use packet shapers or filters to scan the content of CHPWLN files. Filtering CHPWLN files may dramatically reduce performance. If your network uses a content filtering system, it should be configured to trust all content from the CHPWLN servers. Any filtering at your location is redundant and will significantly reduce the overall performance of PLATO Learning courseware.

## Workstation System Requirements

<b>Windows® Vista with SP2</b>	
<b>Processor Speed</b>	<ul style="list-style-type: none"><li>• 1 GHz processor or faster</li></ul>
<b>Memory</b>	<ul style="list-style-type: none"><li>• 512 MB or more for Vista Home Basic</li><li>• 1GB or more for Home Premium / Business / Ultimate</li></ul>
<b>Sound card</b>	<ul style="list-style-type: none"><li>• Sound card and headset (required only if running PLATO Learning audio courseware)</li></ul>
<b>Web browser</b>	<ul style="list-style-type: none"><li>• Internet® Explorer 7.0</li></ul>
<b>Connection</b>	<ul style="list-style-type: none"><li>• (See Connection Speed to PWLN Servers page 4)</li></ul>
<b>Windows® XP Home or Professional with SP3 Windows® 2000 Professional with SP4</b>	
<b>Processor speed</b>	<ul style="list-style-type: none"><li>• 1 GHz processor or faster</li></ul>
<b>Memory</b>	<ul style="list-style-type: none"><li>• 512 MB or more</li></ul>
<b>Sound card</b>	<ul style="list-style-type: none"><li>• Microsoft compatible sound card and headset or speakers (required only if running PLATO audio courseware)</li></ul>
<b>Web browser</b>	<ul style="list-style-type: none"><li>• Internet® Explorer 6.0 with Service Pack 1.</li><li>• Internet® Explorer 7.0</li></ul>
<b>Connection</b>	<ul style="list-style-type: none"><li>• (See Connection Speed to PWLN Servers page 4)</li></ul>

**Note: Windows 64-bit Operating Systems are not supported at this time.**

Macintosh OS 10.5.X users	
Processor	<ul style="list-style-type: none"><li>• PowerPC or Intel</li><li>• <b>Note: The Intel® processor is currently only supported on OS 10.5 while running Safari with Rosetta® enabled. For instructions on how to enable Rosetta mode, please visit <a href="http://support.plato.com/kb/tip.asp?psid=8522">http://support.plato.com/kb/tip.asp?psid=8522</a>. PLATO Learning will continue to support our products running in Rosetta on the Intel-based Mac as long as Apple® is actively supporting Rosetta.</b></li></ul>
Memory	<ul style="list-style-type: none"><li>• 1GB or more</li></ul>
Connection	<ul style="list-style-type: none"><li>• (See Connection Speed to PWLN Servers page 4)</li></ul>
Browsers	<ul style="list-style-type: none"><li>• Safari 3.2.X</li></ul>
Macintosh OS 10.4.11 users	
Processor	<ul style="list-style-type: none"><li>• PowerPC or Intel</li><li>• <b>Note: The Intel® processor is currently only supported on OS 10.4.11 while running Safari with Rosetta® enabled. For instructions on how to enable Rosetta mode, please visit <a href="http://support.plato.com/kb/tip.asp?psid=8522">http://support.plato.com/kb/tip.asp?psid=8522</a>. PLATO Learning will continue to support our products running in Rosetta on the Intel-based Mac as long as Apple® is actively supporting Rosetta.</b></li></ul>
Memory	<ul style="list-style-type: none"><li>• 512 MB or more</li></ul>
Connection	<ul style="list-style-type: none"><li>• (See Connection Speed to PWLN Servers page 4)</li></ul>
Browsers	<ul style="list-style-type: none"><li>• Safari 3.2.X</li></ul>

**Note:** PLATO® Chemistry Series and PLATO® Biology Series are only compatible with Mac OS 10 if the servers are at Client-Hosted PLATO Web Learning Network version 4.0.1 or higher and if the PLATO Chemistry and PLATO Biology updates have been installed. You can request the latest updates at the PLATO® Support Center: <http://support.plato.com>.

**Note:** iPCD3 and MPAS courseware is not supported on Intel Mac as detailed in the requirements update dated October 10, 2006 and located at [http://support.plato.com/alert\\_MacIntel.asp](http://support.plato.com/alert_MacIntel.asp).

## Workstation Configuration Requirements

### Browser Cache Size

The default cache size of the web browsers on your workstations may be adequate; however, cache size can make a difference in performance. In general, you may find that increasing the cache size on your workstations improves system performance.

### Enable JavaScript and ActiveX Controls

**Internet® Explorer** web browsers must have ActiveX® controls and JavaScript enabled to run PLATO courseware. Most browsers have these features enabled by default. However, they may be disabled if someone has changed the default settings in your web browser.

If your workstation has a **Macintosh®** operating system, please see your web browser's Help file for instructions to enable plug-ins, enable scripting, or control access of JavaScript.

If your workstation has a **Windows®** operating system, follow the instructions below for your web browser and version:

#### **Internet Explorer Versions 6.0 (SP1) and higher.**

1. Start Internet Explorer.
2. Click Tools > Internet Options.
3. Click the Security tab.
4. Click the "Default Level" button, and then click **OK**.

*Note: If the "Default Level" button is not active, then your browser already has the correct settings. You do not need to make any changes.*

## Workstation Configuration Requirements, *continued*

### Popup Blockers

Popup blockers must be disabled or configured in order to run PLATO courseware successfully.

Popup blockers prevent extra popup windows (usually advertisements) from opening in your browser. Popup blockers disable JavaScript popup ads. However, they also disable legitimate JavaScript functionality on web sites. PLATO web-based courseware depends on JavaScript to run.

The procedures to remove or configure popup blockers are different, depending on the software. Look for help files in your popup blocker for instructions, or look for menus or buttons on toolbars (such as Yahoo!® or Google®) that allow you to uninstall or disable the blocker. For more details, go to <http://support.plato.com/256>

### Enable Cookies

We recommend, but do not require, that you enable cookies on all workstations that will be running Client-Hosted PLATO® Web Learning Network. CHPWLN uses cookies to remember your account number. If cookies are enabled on your workstation, you will not be required to enter your account number each time you log in.

Web browsers have cookies enabled by default. If you find that cookies are not enabled for the browser on your workstation, you can enable them by following the instructions in your web browser's Help file. (Start your web browser, and then click "Help" on the menu bar at the top of the screen.).

### Downloading & Installing Plug-ins

CHPWLN requires the use of plug-ins on your workstation. You can download and install the required plug-ins when you log in to CHPWLN. We recommend that you download and install the plug-ins before learners try to run courseware. If you have trouble with downloading or installing plug-ins, try the following. Please see your network administrator if you need help:

- Check the rights on Windows® workstations. You must have administrative privileges to the local workstation to install plug-ins.

- If you have a proxy server, check to see if it requires authentication to allow plug-ins to be installed. Anonymous authentication may be required to install plug-ins. (Once the plug-ins are downloaded, anonymous authentication can be disabled.)
- Check to see if desktop security programs or forced policies are limiting access to workstation operating systems.

## Plug-ins for Windows® users

The following plug-ins are required to run PLATO Learning courseware. To download and install plug-ins on workstations with Windows operating systems, click the links below.

[PLATO Plug-ins.](#)

[Flash Player](#)

[Shockwave® Player \(Full Install\)](#)

[Authorware® \(Full Install\)](#)

[PLATO Xtras](#)

## Plug-ins for Mac® OS X users

The following plug-ins are required to run PLATO Learning courseware. To download and install plug-ins on workstations with Mac OS X operating systems, click the links below.

[PLATO Mac Installer program.](#)

[Flash Player](#)

[Shockwave® Player \(Full Install\)](#)

[Authorware® \(Full Install\)](#)

[PLATO Xtras](#)

## Adobe® Reader® (for Windows® and Mac)

Online documentation for PLATO products requires Adobe® Reader® 7.0 or higher. You can download the latest version of Adobe Reader from <http://www.adobe.com/support/downloads/>

You can get online support for CHPWLN and courseware at the PLATO Support Center, <http://support.plato.com>.

**Adobe Reader** - Online documentation for PLATO products requires Adobe Reader 7.0 or higher.  
You can download the latest Adobe Reader from <http://www.adobe.com/support/downloads>.

## APPENDIX A: Server Requirements: Up to 100

Simultaneous PC and/or Mac Connections: Up to  
100  
(Microsoft® SQL Express)

- Your site must provide the local area network infrastructure and be set up to use TCP/IP
- The server must be **dedicated** to Client-Hosted PLATO Web Learning Network only and may not be a domain controller.
- You must have DNS services installed on the network.

Web and Database Server	
<b>Processor speed</b>	<ul style="list-style-type: none"><li>• Dual processor P4 2 GHz 512K on board cache MINIMUM</li></ul>
<b>Memory</b>	<ul style="list-style-type: none"><li>• 2 GB RAM</li></ul>
<b>Storage</b>	<ul style="list-style-type: none"><li>• 36 GB of free disk space in a RAID configuration accessible as a local storage device.</li></ul>
<b>Adapter</b>	<ul style="list-style-type: none"><li>• 100 MBps LAN adapter</li></ul>
<b>Network operating system</b>	<ul style="list-style-type: none"><li>• Windows® Server 2003 Standard installed</li><li>• Microsoft Internet Information Services 5.0 or 6.0 installed</li></ul> <p><b>Note: Windows® 64-bit Operating Systems are not supported at this time</b></p>
<b>Other</b>	<ul style="list-style-type: none"><li>• File backup system</li><li>• Uninterruptible Power Supply (UPS)</li></ul>

## APPENDIX B: Server Requirements: Up to 249

Simultaneous PC and/or Mac Connections: Up to 249

(Microsoft® SQL Server Database System)

- Your site must provide the local area network infrastructure and be set up to use TCP/IP
- The server must be **dedicated** to Client-Hosted PLATO Web Learning Network only and may not be a domain controller.
- You must have DNS services installed on the network.

Web Server (1 server for up to 249 workstations)	
Processor speed	• Dual processor P4 2 GHz 512K on board cache MINIMUM
Memory	• 2 GB RAM
Storage	• 36 GB of free disk space in a RAID configuration accessible as a local storage device.
Adapters	• 100 MBps LAN adapter for connection to the LAN or Intranet
Network Operating System	• Windows® 2000 Advanced Server with Service Pack 4, or Windows® Server 2003 Standard installed • Microsoft® Internet Information Services 5.0 or 6.0 installed <b>Note: Windows® 64-bit Operating Systems are not supported at this time</b>
Other	• File backup system • Uninterruptible Power Supply (UPS)
Database Server	
Processor speed	• Dual processor P4 2 GHz 512K on board cache – MINIMUM
Memory	• 2 GB RAM
Storage	• 36 GB of free disk space in a RAID configuration accessible as a local storage device. REQUIREMENT
Adapter	• 100 MBps LAN adapter

<b>Database Server, continued</b>	
<b>Network operating system</b>	<ul style="list-style-type: none"><li>• Microsoft SQL Server 2000 with Service Pack 3 installed or SQL Server 2005 with Service Pack 2 installed</li><li>• Windows 2000 Server with Service Pack 4, or Windows Server 2003 Standard installed</li></ul> <p><b>Note: Windows 64-bit Operating Systems are not supported at this time</b></p>
<b>Other</b>	<ul style="list-style-type: none"><li>• File backup system</li><li>• Uninterruptible Power Supply (UPS)</li></ul>

## APPENDIX C: Server Requirements: Up to 499

Simultaneous PC and/or Mac Connections: Up to 499

(Microsoft® SQL Server Database System)

- Your site must provide the local area network infrastructure and be set up to use TCP/IP
- The server must be **dedicated** to Client-Hosted PLATO Web Learning Network only and may not be a domain controller.
- You must have DNS services installed on the network.

<b>Web Servers (2 load-balanced servers for up to 499 workstations)</b>	
<b>Load balancing</b>	<ul style="list-style-type: none"> <li>• Multiple web servers must be set up in a load-balanced configuration using either hardware load balancers or the network load balancing (NLB) capabilities of Windows 2000 Advanced Server or Windows Server 2003 Standard. Microsoft NLB requires a hub for most network configurations.</li> </ul>
<b>Processor speed</b>	<ul style="list-style-type: none"> <li>• Dual processor P4 2 GHz 512K on board cache</li> </ul>
<b>Memory</b>	<ul style="list-style-type: none"> <li>• 2 GB RAM</li> </ul>
<b>Storage</b>	36 GB of free disk space in a RAID configuration accessible as a local storage device. REQUIREMENT
<b>Adapters</b>	<ul style="list-style-type: none"> <li>• 100 MBps LAN adapter for connecting to the LAN. A minimum of two NICs installed.</li> </ul>
<b>Network operating system</b>	<ul style="list-style-type: none"> <li>• Windows 2000 Advanced Server with Service Pack 4 or Windows Server 2003 Standard installed</li> <li>• Microsoft Internet Information Services 5.0 or 6.0 installed</li> </ul> <p><b>Note: Windows® 64-bit Operating Systems are not supported at this time</b></p>
<b>Other</b>	<ul style="list-style-type: none"> <li>• File backup system</li> <li>• Uninterruptible Power Supply (UPS)</li> </ul>
<b>Database Server (1 server for up to 499 workstations)</b>	
<b>Processor speed</b>	<ul style="list-style-type: none"> <li>• Dual processor P4 2 GHz 512K on board cache – MINIMUM</li> </ul>
<b>Memory</b>	<ul style="list-style-type: none"> <li>• 2 GB RAM</li> </ul>
<b>Storage</b>	<ul style="list-style-type: none"> <li>• 36 GB of free disk space in a RAID configuration accessible as a local storage device. REQUIREMENT</li> </ul>
<b>Adapter</b>	<ul style="list-style-type: none"> <li>• 100 MBps LAN adapter</li> </ul>

<b>Database Server, continued (1 server for up to 499 workstations)</b>	
<b>Network operating system</b>	<ul style="list-style-type: none"><li>• Microsoft SQL Server 2000 with Service Pack 3 installed or SQL Server 2005 with Service Pack 2 installed</li><li>• Windows 2000 Server with Service Pack 4 or Windows Server 2003 Standard installed</li></ul> <p><b>Note: Windows 64-bit Operating Systems are not supported at this time</b></p>
<b>Other</b>	<ul style="list-style-type: none"><li>• File backup system</li><li>• Uninterruptible Power Supply (UPS)</li></ul>

## APPENDIX D: Server Requirements: **500 +**

Simultaneous PC and/or Mac Connections: **500 +**  
(Microsoft® SQL Server Database)

- Sites with 500 or more users require a custom configuration; please contact PLATO Support Services at 800.869.2200 for more information.