



**PLATO Web Learning Network
System and Configuration Requirements**

for workstations

September 9, 2005

- Windows 98 Second Edition
- Windows Millennium (ME)
- Windows 2000 Professional with SP4
- Windows XP Professional
- Windows XP Home Edition
- Mac, OS 10.1, 10.2, 10.3.8, 10.4.2

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Document Change Log

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

Date	Updates
09/01/04	<ul style="list-style-type: none"> • Added Netscape 7.0 as a supported browser for Mac OS 9.2 (page 2) • Increased memory requirement for Mac OS 9.2 from 128 MB to 256 MB; may be all physical memory or a combination of physical and virtual memory (page 2) • Changed memory allocation to browser from 40 MB to 60 MB (page 2) • Added statement that Service Pack 2 for Windows XP is not supported; it is currently being tested (page 2) • Under browser support for Mac OS X IE, added note about potential "Session ID error"; workaround is to refresh the screen (page 3)
03/17/04	<ul style="list-style-type: none"> • Added requirement to disable popup blockers (page 7) • Added Adobe Reader 6.0.1 requirement (page 8) • Updated Pre-Installation Checklist (pages 9-13)
03/16/05	<ul style="list-style-type: none"> • Removed requirements for Macintosh users. • Updated Support site and Request form URLs
04/01/05	<ul style="list-style-type: none"> • Updated MAC processor, OS, and Browser requirements.
04/08/05	<ul style="list-style-type: none"> • Updated minimum bandwidth requirements from 30 kbps to 40 kbps
4/26/05	<ul style="list-style-type: none"> • Removed open port 443 requirement • Added support for Windows XP SP2 • MAC OS 10.3.9 and Safari 1.3 are not supported at this time. • Added ability to configure pop-up blockers instead of disabling them. • Popup Blockers may be configured or disabled to enable PLATO courseware.
5/25/2005	<ul style="list-style-type: none"> • Netscape 8 is not supported at this time. • MAC OS 10.3.9 and Safari 1.3 is not supported at this time. • MAC OS 10.4 and Safari 2.0 is not supported at this time.
9/9/2005	<ul style="list-style-type: none"> • Added MAC OS 10.4.2 support with Safari 2.0.1.

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 customers about the environmental specifications for PLATO® Web Learning Network (PWLN).

In general, most user experience on the Internet 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 than HTML. Therefore, the system requirements for PLATO Web Learning Network and PLATO® courseware are higher than if you were simply browsing HTML web pages.

In addition, many other factors can affect your Web Learning Network performance, including the following:

- Proxy servers and caching
- Firewalls
- Switches
- Available bandwidth of your local network
- Quality of the bandwidth provided by your Internet Service Provider

All of these factors interact with each other and can impact performance. Any combination of these variables may affect your 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 marketing@plato.com.

PLATO Web Learning Network System & Configuration Requirements

Workstation System Requirements

Following are hardware requirements for workstations to run PLATO® Web Learning Network. The system should function without error at an acceptable performance level when requirements are met.

Windows® 98 Second Edition, Windows® ME	
Processor speed	<ul style="list-style-type: none"> • Intel Pentium II 400 MHz or faster – REQUIREMENT
Memory	<ul style="list-style-type: none"> • Windows 98 SE: 64 MB or more – REQUIREMENT • Windows ME: 128 MB or more – REQUIREMENT
Sound card	<ul style="list-style-type: none"> • Microsoft compatible sound card and headset (required only if running PLATO audio courseware)
Internet connection	<ul style="list-style-type: none"> • (see <i>Internet Connection Speed</i> on pages 4-5) •
Browsers	<ul style="list-style-type: none"> • Internet® Explorer 6.0 with Service Pack 1 • Netscape® 7.1 <p>NOTE: Netscape® 8 is not supported at this time.</p>
Windows® XP SP2 Professional or Home Edition Windows® 2000 Professional with SP4	
Processor speed	<ul style="list-style-type: none"> • Intel Pentium III 500 MHz or faster – REQUIREMENT
Memory	<ul style="list-style-type: none"> • 256 MB or more – REQUIREMENT
Sound card	<ul style="list-style-type: none"> • Microsoft compatible sound card and headset (required only if running PLATO audio courseware)
Internet connection	<ul style="list-style-type: none"> • (see <i>Internet Connection Speed</i> on pages 4-5) •
Browsers	<ul style="list-style-type: none"> • Internet® Explorer 6.0 with Service Pack 1 • Netscape® 7.1 <p>NOTE: Netscape® 8 is not supported at this time.</p>

MAC OS 10.1 and 10.2 users

Processor speed	<ul style="list-style-type: none">G4, G5
Memory	<ul style="list-style-type: none">256 MB or more – REQUIREMENT
Sound card	<ul style="list-style-type: none">Sound card and headset (required only if running PLATO audio courseware)
Internet connection	(see <i>Internet Connection Speed</i> on pages 4-5)
Browsers	<ul style="list-style-type: none">Netscape® 7.2

Macintosh OS 10.3.8 users

Processor speed	<ul style="list-style-type: none">G3 366Mhz and higher, G4, and G5
Memory	<ul style="list-style-type: none">256 MB or more – REQUIREMENT
Sound card	<ul style="list-style-type: none">Sound card and headset (required only if running PLATO audio courseware)
Internet connection	(see <i>Internet Connection Speed</i> on pages 4-5)
Browsers	<ul style="list-style-type: none">Safari 1.2 <p>NOTE: OS 10.3.9 and Safari 1.3 is not supported at this time.</p>

Macintosh OS 10.4.2 users

Processor speed	<ul style="list-style-type: none">G4 and G5
Memory	<ul style="list-style-type: none">256 MB or more – REQUIREMENT
Sound card	<ul style="list-style-type: none">Sound card and headset (required only if running PLATO audio courseware)
Internet connection	(see <i>Internet Connection Speed</i> on pages 4-5)
Browsers	<ul style="list-style-type: none">Safari 2.0.1

All workstations also require the following:

- Hard disk space sufficient to run your workstation's operating system and browser properly.
- Mouse
- Keyboard
- Monitor

CONFIGURATION REQUIREMENTS

Before you can access PLATO® Web Learning Network and run PLATO® courseware, the following configuration requirements must be met. Please make sure you or your network administrator have met these requirements before you or your students use PLATO Web Learning Network.

Open Ports

If you access Web Learning Network from behind a firewall or other network security device that limits port access to the Internet, you must open the following ports for network data traffic. You will not be able to access Web Learning Network or run courseware through Web Learning network unless these ports are open.

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.

Port 80	Standard HTTP port for web page access
Port 1209	Ports 1209 must be open to TCP outbound only.
UK clients only: Port 1494	In addition to the above ports, clients located in the United Kingdom must open port 1494 to TCP outbound only.
UK clients only: Port 1604	In addition to the above ports, clients located in the United Kingdom must open port 1604 to UDP outbound only

Internet Connection Speed

PLATO Web Learning Network requires a connection to the Internet with a *minimum connection speed*, depending on the courseware you are running.

If you're accessing the Internet through a local area network (LAN), many factors can affect your actual connection speed, including improperly configured network settings on the LAN or on workstations, using low bandwidth hubs instead of switches, and your actual Internet bandwidth.

**CONFIGURATION
REQUIREMENTS,**
continued

Your actual Internet bandwidth depends on the number of simultaneous users and the specific courseware you are using. In general, PLATO Learning recommends 1.2 mbps (megabits per second) of available bandwidth for each 30 simultaneously used workstations, or about 40 kbps (kilobits per second) per workstation for most PLATO courseware. PLATO Life Science requires 128 kbps per workstation.

If you're using a **modem** to connect to the Internet, your effective connection speed may vary. Most PLATO Web Learning Network courseware requires an average connection speed of 40 kbps *minimum* for a modem. PLATO Life Science requires 128 kbps minimum, which is much faster than a dialup modem can attain.

If your modem does not connect at speeds of at least 40 kbps (or 128 kbps for PLATO Life Science), the performance of PLATO Web Learning network will be negatively affected. For these reasons, we recommend using a DSL or cable Internet connection instead of a dialup modem to run PLATO courseware. DSL and cable Internet connections are capable of much higher data transmission speeds than a modem and telephone line.

Filtering Software

We recommend that you do not use web filters to scan the content of Web Learning Network files. Filtering Web Learning Network files may dramatically reduce performance. If your network uses a content filtering system, we recommend that it be configured to trust all content from our domain. We take great precautions at our data center to insure that all content delivered is free from viruses and inappropriate material. Any filtering at your location is redundant and will significantly reduce the overall performance of PLATO Web Learning Network.

Browser Cache Size

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

CONFIGURATION REQUIREMENTS

Enable JavaScript and ActiveX Controls

Internet Explorer web browsers must have ActiveX[®] controls and JavaScript enabled to run PLATO courseware. **Netscape** browsers must have 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 Java Scripts.

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

Internet Explorer Version 6.0 (with Service Pack 1)

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.

Netscape web browsers

1. Start Netscape.
2. Click Edit > Preferences > Advanced (in the Category list).
3. Select the following preferences (the default settings for Netscape browsers):
 - ✓ Automatically load images
 - ✓ Enable Java
 - ✓ Enable JavaScript
 - ✓ Enable style sheets
 - ✓ Enable Auto Install (not available on Macintosh OS)
4. Click **OK** to accept the changes. Click **Cancel** if your default settings were already correct, and you didn't need to make any changes.

CONFIGURATION REQUIREMENTS

Popup Blockers

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

Popup blockers or stoppers are typically used to prevent extra popup windows (usually advertisements) from opening in your browser. Popup blocking software disables JavaScript popup ads, but it also disables legitimate web site functionality that uses JavaScript. PLATO web-based courseware depends on JavaScript to run.

The procedures to disable or configure popup blockers are all 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/kb/tip.asp?psid=25636>

Enable Cookies

We recommend, but do not require, that you enable cookies on all workstations that will be running PLATO® Web Learning Network. Web Learning Network uses cookies to remember your account number. If cookies are enabled on your workstations, you will not have 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.)

CONFIGURATION REQUIREMENTS

Download & Install Plug-ins

PLATO Web Learning Network requires the use of plug-ins on your workstation. You can download and install the required plug-ins when you log in to Web Learning Network, or download them direct from vendor web sites.

Downloading and installing the plug-ins may take a fair amount of time, depending on your connection speed and number of installs. We recommend that you download and install plug-ins ahead of time, before students try to run courseware. When users download plug-ins, they must have administrative privileges to the workstation and close all open programs.

If you have trouble with downloading or installing plug-ins, try the following:

- Check the rights on Windows® 2000/XP workstations. Windows 2000/XP users must have **administrative privileges** to the local workstation or be set up as power users in order to install plug-ins. Please see your network administrator if you need help.
- 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.) Please see your network administrator if you need help.
- Check to see if desktop security programs or forced policies are limiting access to workstation operating systems. Please see your network administrator if you need help.

Adobe Reader

Online documentation for PLATO products requires Adobe Reader 6.0.1. Acrobat and Adobe Reader 6.0 do not support printing PDF files with URLs longer than 256 characters. The Acrobat and Adobe Reader 6.0.1 updates resolve this issue. You can download the updated version of Adobe Reader (v. 6.0.1) from <http://www.adobe.com/support/downloads>.

MACINTOSH WORKSTATIONS

10. What processor and version(s) of Mac OS/Browser are the workstations running? _____

MAC OS 10.1, 10.2 with
Netscape 7.2 and G4 or G5
processor with a minimum of 256
MB of RAM

Supported versions are: OR

MAC OS 10.3.8 with Safari 1.2 or
MAC OS 10.4.2 with Safari 2.0.1
and G4 or G5 processor with a
minimum of 256 MB of RAM

**NOTE: OS 10.3.9 and
Safari 1.3 is not
supported at this time.** _____

- | | | |
|-----|----|---|
| YES | NO | 11. Workstations meet minimum processor requirements. |
| YES | NO | 12. Workstations meet minimum memory requirements. |
| YES | NO | 13. Workstations meet minimum display properties requirements. SVGA monitor and video adapter set to at least 800 x 600 pixels and High Color (16-bit). |
| YES | NO | 14. Workstations meet minimum Internet connection speed requirements.
Reliable 40 kbps or faster connection for most PLATO® courseware; 128kbps or faster for PLATO® Life Science. |

BROWSER CONFIGURATION

- YES NO 15. Do all workstation's browsers have ActiveX controls enabled?
- YES NO 16. Do all workstation's browsers have JavaScript enabled?
- YES NO 17. Do all workstation's browsers have Cookies enabled?
- YES NO 18. Do all workstation's browsers have Macromedia Shockwave installed (required for Elementary content)?
- YES NO 19 Do all workstation's browsers have Macromedia Flash installed?
- YES NO 20 Do all workstation's browsers have Macromedia Authorware installed (required for science content)?
- YES NO 21. Do all Windows workstation's browsers have the PLATO® plug-ins (PWLNINST.EXE) installed?
- YES NO 22. Do all Mac workstation's browsers have the PLATO® plug-ins (Plato_Mac_Installer.hqx) installed?
- YES NO 23. Do all workstation's browsers have Shockwave XTRAS installed (required for Elementary content)?
- YES NO 24. Do all workstations have Adobe Acrobat Reader installed?
- YES NO 25. Is there an antivirus program running on the workstations?
Product: _____
- YES NO 26. Have you configured Internet Explorer to enable downloads? You must enable file downloads to run PLATO® courseware.
- YES NO 27. Are there any desktop security packages (Fortres, Foolproof, Mac Manager, Etc.) installed on the network or workstations? If YES, please list.
Product _____ Version _____
- YES NO Password to disable system _____
- If you choose not to list the password here, someone must be on-site to provide the information to the PLATO® Account Implementation Manager or PLATO® Support Analyst if issues arise.*

NETWORK & SECURITY CONSIDERATIONS

What is your actual usable network bandwidth to <http://platoweb.com>? _____
 Please list the method by which you tested this usable bandwidth: _____

- YES NO 28. Is there any wireless networking on-site that will be used by any workstations to access PLATO® products? Standard: 802.11 _____
 How many workstations to an access point (average)? _____
- YES NO 29. Do you exclusively use 100 Mbps hubs and switches?

Firewalls & Open Ports

If your workstations will access PLATO® Web Learning Network from behind a firewall or, in some other way have limited port access to the Web Learning Network server, the following ports must be opened for network data traffic in both directions. You will NOT be able to access PLATO® Web Learning Network or run courseware unless these ports are open. In addition, setting a port to timeout too early can lead to unnecessary session disconnects. Time out settings should be set to no less than 30 minutes.

Port 80		Standard HTTP port for web page access and delivery of WebPLATO® courseware
YES	NO	30. Will you open this port?
YES	NO	31. Will you set the time out to at least 30 minutes?
Port 1209		TCP port for delivering iPLATO® courseware, open outbound
YES	NO	34. Will you open this port?
YES	NO	35. Will you set the time out to at least 30 minutes?
YES	NO	36. Do you plan to restrict access to these ports to specific IP addresses? If YES, what is the address range for the restriction? _____

Proxy Servers & Content Caching

If you use a proxy server, please make sure that the ports listed above are also open at the proxy server. In addition, we strongly recommend that you disable content caching.

- YES NO 37. Do you use a proxy server? Product: _____
- YES NO 38. Is content caching disabled?
- YES NO 39. Will proxy be by-passed for local addresses on the workstation's web browser?

Content Filters

If your network uses a content filtering system, we recommend that you configure it to trust all content from the PWLN servers to avoid reducing the overall performance of PLATO® Web Learning Network.

- YES NO 40. Do you currently filter web content? Product: _____
- YES NO 41. Will filtering be bypassed for local addresses?

APPROVAL SIGNATURES

PLEASE NOTE: Proper hardware configuration and software installation is critical to the overall success of your PLATO® software implementation. The technical contact person at your site must sign and date the checklist below to confirm that it has been accurately completed.

THIS CHECKLIST HAS BEEN ACCURATELY COMPLETED:

Date: _____

School or District Name: _____

Name of person completing the checklist: _____
(Please print clearly)

Signature: _____ Date: _____

INSTRUCTIONS:

After your technical person signs this checklist, please FAX it to your PLATO® Account Implementation Manager.

Date Faxed: _____

Our technical staff will review this checklist and follow up with your contact person as needed.