



## **Setting Permissions and Rights in PLATO Pathways**

**A white paper from PLATO Support Services**

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- PLATO® Pathways
- PLATO® courseware

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# Setting Rights and Permissions in PLATO Pathways

## Introduction

One of PLATO Support's most frequently asked questions is "What rights and permissions do users need to use the PLATO® Pathways system?" This white paper addresses this question, explains how to customize rights and permissions, and provides troubleshooting tips for rights and permissions issues.

When writing this white paper, these assumptions were made:

- The version of PLATO Pathways is 4.2.
- The intended audience is IT personnel who manage networks and workstations.
- The operating system of the file server is Windows 2000/2003 Server.
- Almost everything referenced will also work with the earlier versions of Windows (NT 4.0).
- The same principles apply to Novell® Netware servers, but the terminology is slightly different.

## PLATO Pathways Overview

Before we address the question of rights and permissions, it will be helpful to understand that PLATO Pathways has two components: a **management system** and **learning activities (courseware)**. The management system's user interface manages database functions and launches learning activities.

The amount of control you have over the database is determined by the role you have been assigned within PLATO Pathways (also a database function).

The *administrator* role allows a user complete control over the system. As an administrator, you can perform all standard database functions – add, modify and delete – on all parts of the database (users, curriculum, and classes.) Two predefined roles that are subsets of the administrator role are *Instructor* and *Registrar*.

The *learner* role is the most restricted. As a learner, you can only use the database to work on assigned tasks, which appear as menus or learning paths.

Because PLATO Pathways database activity is managed from within the program itself, we usually recommend that you create a specific network user who has the appropriate level of access to the PLATO Pathways folders and files. (PLATO installation instructions suggest a user named *pathways*.) This approach allows PLATO Pathways users access to the system while blocking out non-users of the system.

In addition to controlling access to the server where the PLATO Pathways folder and files reside, you must also ensure that users have the correct access to various workstation folders and files that are installed by the PLATO Pathways client, WSETUP.EXE.

### **How Pathways Works**

For PLATO Pathways to work correctly, two components need to be installed: the **server files** and the **workstation client**. The file server contains all the files for the PLATO Pathways system - the programs, the courseware content, and the various database files. PLATO Pathways uses the classic file server model. There are no PLATO® programs that run on the server. The only purpose of the server is to send requested files to workstations that run PLATO programs.

The PLATO Pathways workstation client must be installed on any workstation that is going to allow a user access to PLATO Pathways or PLATO® courseware. The client consists of program files, font files, configuration files (INI files), and certain database files. To access the PLATO® Pathways system, a user clicks on a PLATO Pathways shortcut (usually on the desktop) that executes the PLATO® startup program residing on the file server. The user is guided through a signon process that determines the role or level of access the user has within the system.

Administrators of the system can modify virtually all database tables. For instance, they can add, delete, or edit the properties of PLATO Pathways learners. Learners can read certain databases, such as courseware menus, and only modify their own records automatically.

Setting up the server and workstations is relatively easy to do if you follow standard installation procedures, which are covered in the next sections.

## **Initial Pathways Server Setup**

When you install PLATO Pathways for the first time, the installation instructions guide you through the initial steps to ensure the installation is successful. For Windows 2000/2003, these steps are:

1. At the server, create a PLATO folder (usually named **PLATO**).
2. Share the folder with the share name **PLATO**.
3. Create a user named **pathways**.
4. Give the user **pathways** **CHANGE** access to the shared PLATO folder.

After these initial setup steps are completed, the PLATO Pathways installation program will install the server files with the correct file and folder attributes.

## Initial Workstation Setup

Setup and usage of the PLATO® client on a workstation is affected by three things:

1. Which operating system (OS) you are using
2. The file system the OS is using (FAT32 or NTFS)
3. What third-party security software you are using

### Operating System

The entry-level operating systems supported with PLATO Pathways are Windows® 98 Second Edition. Windows® 2000 Professional and Windows® XP Professional are also supported in network configurations. Windows® 95 is no longer supported because Microsoft, Inc. no longer supports it.

On a Windows 98 workstation, anyone who can log on to the workstation has complete control over that workstation unless additional security has been enforced via Windows® policies or third-party security.

Windows 2000/XP works differently. Windows 2000/XP enforces security by creating different types of users with different types of rights. The most powerful user is an **administrator**. This user has complete control over the workstation. Ordinary users have limited rights on the local workstation, especially to the Windows (WINNT) OS folder. These user rights are tied to the file system.

### File System

Windows 98 SE uses the FAT32 file system, which does not have the same level of file security as Windows 2000/XP. With Windows 98, anyone who can log on to the workstations has complete control over that workstation unless additional security software has been installed.

Windows 2000/XP can use the FAT32 or NTFS file system. If the FAT32 file system is installed (more likely on Windows 2000 workstations), then the regular user has full access to the Windows folder and you do not have to worry about file rights or permissions when using PLATO Pathways on the workstation.

### Third Party Security

Many third-party products can alter the way a user interacts with the workstation. These products behave differently and affect using PLATO differently. Generally, there are two ways these products work. Products such as Foolproof® Security and Fortres 101 security software lock down the workstation by limiting program and file access, depending on the user's logon name. Other products, such as DeepFreeze and Clean Slate security software, capture an image of the workstation, allow a user to make any changes to the workstation, and then set the workstation back to its "captured" state every time it is restarted. While a discussion on third-party security products is beyond the scope of this white paper, it is important to know they can affect the rights and permissions of the workstation and thereby affect the successful operation of PLATO Pathways.

## Installing the PLATO Client Setup Program

Follow these steps to install the PLATO Pathways client:

1. If you have a Windows 2000/XP workstation, log on to the local workstation as an **ADMINISTRATOR** or equivalent.
2. Map a drive to the shared folder on the server where PLATO Pathways resides. (Usually it's the Q drive, but this depends on which drive was used when your PLATO Pathways system was installed.)
3. Use Windows Explorer to find the program WSETUP.EXE (Q:\PWAY\WSETUP.EXE) and launch it.
4. Follow the instructions to install all components of this program.
5. If you have a Windows 2000/XP workstation, run the SETPERMS program. Click the link below to download SETPERMS from the PLATO Support website: <http://platosupport.plato.com/downloads/accountability/pathways/downloads/SETPERMS.ZIP>
6. Restart your workstation.

Caveats:

- Remember to make the drive mapping persistent at the workstation.
- Remember to log on to the local workstation as an administrator in Windows 2000/XP; otherwise, the install program will fail.
- Before you install third-party security software, install the PLATO Pathways client first. If third-party security software is already installed, **uninstall** it, run WSETUP.EXE, and then re-install the security software. In our experience, simply disabling the security software still prevents the client from installing successfully.

## Customizing PLATO Permissions and Rights

If your site prefers to impose stricter limitations than those of the standard installation, you will need two different types of network logins – one for teachers (or administrators) who manage the PLATO Pathways system, and one for learners. In most cases, IT staff who want stricter limits usually have created individual logons for everyone in their system. The easiest way to accomplish this is to create two user groups –one for PLATO teachers/administrators and one for PLATO Learners. Then you can make the following modifications:

### Rights/permissions for teachers (administrators)

Give teachers/administrators **MODIFY**<sup>1</sup> permissions to the entire Pathways folder (\PWAY).

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<sup>1</sup> Note to users who have Novell servers. MODIFY is equivalent to RWCEMF (Read, Write, Create, Erase, Modify, File Scan). READ permissions translate as RF (Read, File Scan).

## Rights/permissions for learners

Give learners **MODIFY** permissions to the \PWAY folder. Be sure to check "Replace permissions on existing files." (This is because management system work files are installed in this folder.)

Give learners **READ-ONLY** permissions to the following subfolders under the \PWAY folder. Be sure to apply permissions to all subdirectories and files:

- BIN
- CW
- DOSSUPP
- INSTLOG
- LOGS
- OVERRIDE
- PCD3SYS
- POSTSCRIP
- PRESCRIP
- QLSYS
- SCRIPTS
- WINPLATO
- WINSUPP
- WBPLAYER

Give learners **MODIFY** permissions to the following subfolders under the \PWAY folder:

- DB
- LICENSE
- LOGS\Migration
- PRIVATE
- PRIVDB
- TRACKLOG
- CW\040 (if it exists)
- CW\041 (if it exists)

Give learners **MODIFY** permissions to the following files:

- TROEXCPTN.LOG in the \PWAY\BIN subfolder
- ERRORLOG.TXT in the \PWAY\BIN subfolder (if the file does not exist, create it)
- All files with the .DAT extension (\*.DAT) in the \PWAY\DOSSUPP folder

Give learners **READ-ONLY** permissions to the following files in the \PWAY folder:

- WCMISYS.INI
- WSETUP.EXE

## Workstation File Permissions

Running SETPERMS will correctly configure the local workstation client so that an ordinary user can run PLATO Pathways. Here's what it does: (Note: Some client workstations may have a WINDOWS folder in place of a WINNT folder. SETPERMS will get it right.)

- Sets NTFS **CHANGE** permissions for \WINNT\Temp, \WINNT\PCWAY, and WCMIS.INI (Note: some workstations may have a Windows folder instead of a WINNT folder)
- Installs Worldview version 1 or 2 files
- Creates CyberEd folders under WINNT and assigns **CHANGE** permissions to the following folders:
  - \WINNT\A3W\_DATA
  - \WINNT\A4W\_DATA
  - \WINNT\A5W\_DATA
  - \WINNT\APW\_DATA
- Registers the MSWINSCK.OCX control used in Algebra 1 and 2
- Bypasses proxy server for local addresses for Algebra 1 and 2, version 1.0
- Runs WSETUP if it has not already been run on the workstation
- Moves the Pathways icon to the All Users Desktop (from the administrator user who initially ran WSETUP)

## Troubleshooting

The following error messages may indicate that permissions and rights are set incorrectly:

- Waiting for IDS file resource
- Access or permission is denied
- Cannot access directory
- Cannot perform this operation on a closed dataset
- Directory does not exist
- File does not exist
- File is locked
- Index does not exist
- I/O error 103
- Network error on drive Q: (insufficient rights during an install)
- Table does not exist
- Table is read-only
- Unable to initialize Pathways database (or user)
- Unable to write to...
- Read-write access to Windows folder is required

These issues also indicate you are having a problem with permissions and rights:

- Network or local administrators (not PLATO Pathways administrators) can run PLATO Pathways without error, while other network or local accounts cannot run PLATO Pathways
- WSETUP fails during the installation of QuickTime®

Try these things first if you encounter error messages or issues with permissions and rights:

- Check to see if the person accessing PLATO software is using the correct network logon.
- Make sure the network user logon has the correct permissions for PLATO Pathways. If not, add this user to the correct PLATO Group or manually assign permissions to this user.
- If the problem is a local rights issue, rerun SETPERMS on the workstation (Windows 2000/XP)
- Check to see if there is a security program installed on the local workstations. Disable any security software found and see if PLATO software runs successfully.

If problems with permissions and rights still occur, go to the **PLATO Support website** (<http://platosupport.plato.com>) to search the knowledge base for the error message or problem you are experiencing.

Following are support tips that deal with permissions and rights:

- [5932 - What Rights or Permissions Should I Assign to Pathways Users?](#)
- [4404 - Windows 2000: Optional Security & Permissions for Pathways Learners](#)
- [6616 - How to Run the SETPERMS Utility to Configure Pathways Workstations](#)
- [Download the SETPERMS Utility](#)
- [5936 - Permission Denied, Access Denied, Unable To Write To...; File, Table, or Index Does Not Exist](#)
- [3826 - Optional Novell Rights and Security for Pathways Learners](#)
- [6469 - Novell Netware 6: Waiting for IDS Resource](#)
- [4173 - Biology and Chemistry Require Read Write Access to Windows Folder](#)
- [7418 - Error Accessing Registry When Trying to Run Worldview Courseware](#)

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