

Netop School student computers in a shared XP environment

This technical article explains how to set up Netop School to use virtualization software so that several students can share the same computer.

In a virtualization scenario the Netop School Student software is installed on a single computer and instead of having a PC of their own, each student in class has a small access device with monitor, keyboard, and mouse attached. The access device is connected to the computer with the Netop School Student software installed and by means of desktop virtualization software each student simultaneously uses the software on the single Netop School Student computer. Each student will still experience that he or she has a PC of their own.

The main advantage of using access devices as virtual desktops is financial since the cost of an access device with virtualization software is considerably less than the cost of a PC. In addition the maintenance effort likely decreases with only one PC in the configuration.

Netop has installed and tested using the following hardware and software:

Netop School

- Standard Dell OptiPlex with Windows XP SP3 Professional
- Netop School version 6.01, build 2009139 (or newer), both Teacher and Student

Virtual desktops

- Vendor specific. On some systems we have identified that the XP system needs uninstalling of 2 Windows updates: kb952004 and kb956572

Note that all users must/may have to log on using different user names.

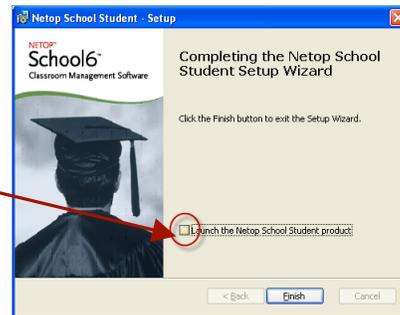


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How to set up Netop School Teacher and Student

1. Install Netop School Teacher and Netop School Student but do **NOT** start any of the programs:

Clear the launch check box in the last install step to prevent the program from starting automatically.



2. Edit the netop.ini file; the netop.ini file is located in the Windows folder.

Add the following sections to the netop.ini file:

```
[DANWARE]
ForceTSE=1
[STUDENT]
DataPath=C:\Documents and Settings\%username%\Application
Data\Netop\Netop School\Student
```

Explanation

ForceTSE=1 Is used to force Netop School into a Terminal Server Edition state.

DataPath=.. The path must include %username% to ensure that different users have their own path defined so that there are no read/write issues. We recommend the home path for each user.

The data path defines where Student application configuration files are located. When the environment variable %username% is used, it is automatically substituted with the active user's login. This means that when the user "JohnDoe" logs on, the Student module knows that his configuration files are located here: C:\Documents and Settings\JohnDoe\Application Data\Netop\Netop School\Student. When next the user "JaneDoe" logs on, her configuration files are located here: C:\Documents and Settings\JaneDoe\Application Data\Netop\Netop School\Student.

The default path is:

C:\Documents and Settings\All Users\Application Data\Netop\Netop School\Student

However, this path cannot be used because a shared XP system is not a "real" terminal server and all users need read/write access to



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configuration files.

3. Start the Student module.
The Netop School Setup wizard starts automatically and leads you through the required setup. Below are the pages where you need to make changes; on the other pages, leave the default settings:

- Classroom** page:
- Select **Connect to class** and type a class name (the default "My Class" can be used).
 - Under **Identify Student by**, select **Windows logon name**.
- Communication profile** page:
- Under **Communication profile**, select **Terminal Server**.

Finish the Student wizard and exit the Student program.

4. Start the Teacher module and go through the setup wizard to make the same changes on the **Classroom** page and on the **Communication profile** page.

Finish the Teacher wizard and exit the Teacher program

5. Ensure that all Student users have their own set of configuration files.
 - Start Windows Explorer and browse to the DataPath location. For example, if the user who installed the Student software has user name "JohnDoe", browse to C:\Documents and Settings\JohnDoe\Application Data\Netop\Netop School\Student.
 - Copy all folders and files beneath the DataPath location to the DataPath of all the future student users. As the Student module users will vary, use generic names like "Student01", "Student02", "Student03" and so on. Following the example from above, these folders (with files and sub folders) will exist after the copy:
 - C:\Documents and Settings\JohnDoe\Application Data\Netop\Netop School\Student
 - C:\Documents and Settings\Student01\Application Data\Netop\Netop School\Student
 - C:\Documents and Settings\Student02\Application Data\Netop\Netop School\Student
 - C:\Documents and Settings\Student03\Application Data\Netop\Netop School\Student

Also, to ensure that the configuration files beneath the DataPath location are used as the default setup for future students:

- Copy all folders and files beneath the DataPath location to C:\Program Files\Netop\Netop School\Student.

Tip

If, at a later time, you need to change the configuration on all your student computers then you need to copy the configuration files to each of the students' DataPath.



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6. Create a shortcut to the Student module.

To make sure the Student module starts when a user logs on to Windows, you need to create the shortcut in

C:\Documents and Settings\Default User\Start Menu

This will add a shortcut to new users.

For existing users, you should also create a shortcut on the Start menu under each user name, for example:

C:\Documents and Settings\JohnDoe\Start Menu

C:\Documents and Settings\Student01\Start Menu

C:\Documents and Settings\Student02\Start Menu

C:\Documents and Settings\Student03\Start Menu

This is necessary because a shared XP system is not a "real" terminal server: Normally Netop Student runs as a service and is started before the user logs on to Windows but this is not the case with this kind of system. This also means that students will experience a considerable delay in the Student module startup. In the test scenario the Student startup took approximately 1 minute.

We recommend that only teacher users have access to the Teacher module. Restrict access to the Teacher module from Windows Explorer.

Netop School Teacher and Student have now been configured to allow multiple access devices use the Student software. For hardware and software installation and setup, please refer to information from the hardware vendor.

Known issues in Netop School when using shared XP systems

The list below describes known issues using shared XP systems with Netop School. Note that list may be incomplete: Using ForceTSE in the .ini file, forces Netop School into a terminal server state which is normally used only in an actual terminal server environment. The testing may not have covered all potential usage areas.

- In the Teacher module, **Activity** (which monitors the applications that Student computers are running) will not work.
- The view in **Thumbnails** is too blue (some systems only). Reduce the number of colors user to improve the view: In **Thumbnails** view, right-click and on the shortcut menu point to **Thumbnail** and then click **Customize**. In the **Customize Thumbnail** dialog box, set **Colors** to 256.
- Netop School Students are slightly slower than when running on actual PCs.
- Contrary to normal Netop School behavior, students are not prevented from pressing Ctrl+Alt+Del when the teacher is using demonstrate.
- General issue: please note that because the Student module does not run as a service but is started after the user has logged on, student users' access rights are defined by their Windows access rights. This means that if their Windows access rights grant them



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access to, for example, the Task Manager, they also have Task Manager access when running the Student module.

Netop School tips when using shared XP systems

- Set a protection password so that Student users cannot change the configuration:
 1. On the **Tools** menu in the Student module, click **Protection Password**.
 2. In the **Protection Password** dialog box, select the **Configuration** check box and then click the **Change Protection Password** button to define the password you want to use.
- Set the Student module up to run in hidden mode so that students see the module only when the teacher uses Netop School Teacher:
 1. On the **Tools** menu in the Student module, click **Options**.
 2. In the **Options** dialog box, double-click **General**.
 3. Under **Startup**, select the **Stealth mode (hide Student when started)** check box.
- Prevent the Student module from starting when Windows starts:
 1. On the **Tools** menu in the Student module, click **Options**.
 2. In the **Options** dialog box, double-click **General**.
 3. Under **Startup**, make sure that the **Load Student at Windows startup** is cleared.



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