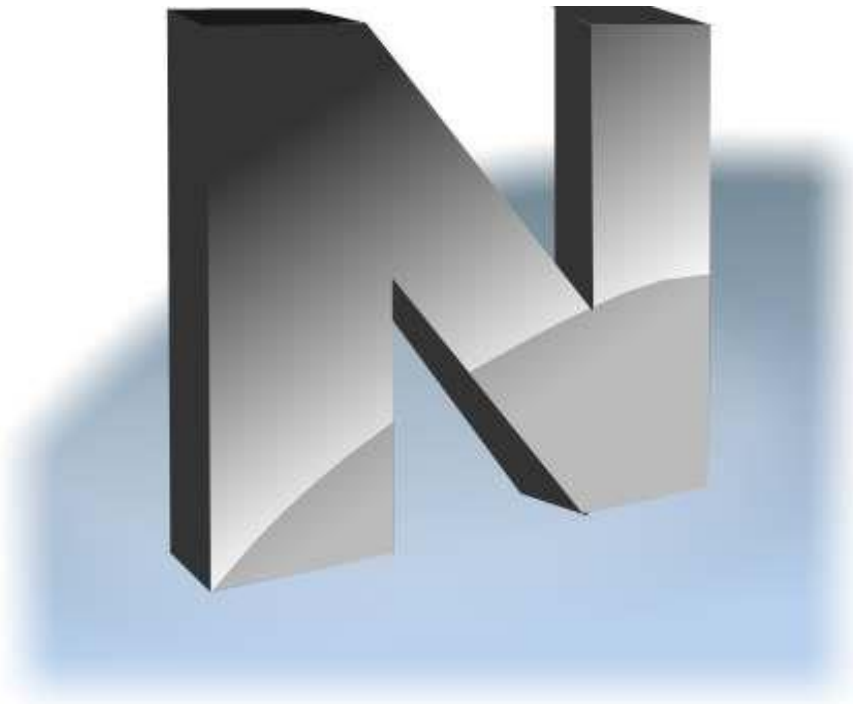THE CLASSROOM MANAGEMENT SOFTWARE

NET CONTROL²

Classroom

(STANDARD EDITION)

INSTALLATION AND CONFIGURATION GUIDE

Revision 5.0
(February 1, 2017)

Based on version 12.0

Table of Contents

General information

Net Control ² Classroom (Standard Edition) is a classroom management software for easy controlling, monitoring and managing computers in local networks.

The software consists of two main parts – **Teacher Component** and **Student Component**.

You need to install the student component of the software on each student computer that will be managed with **Net Control ² Classroom** software. *The* **Teacher Component** should be installed on each computer that will be used to control other computers. Both components may be installed on the same computer.

The *Teacher Component* should be installed manually using the standard installation package.

The *Student Component* may be installed using one of the following methods:
 – manually on each student computer, using the standard (.exe) installation package;
 – deployed automatically through Microsoft Windows Active Directory/Group Policies service and using a special MSI distribution package. The special MSI package is available by request for registered users;
 – deployed through Microsoft Windows Active Directory or SCCM scripts, using the standard installation package (.exe) in a non-interactive mode, pre-configured with command line parameters;
 – the built-in Net Deploy tool allows centralized deployment of the software in a network with a domain, if administrator tools are enabled and several other conditions met as described below, in Chapter K of this manual.

Hardware requirements and software environment

Microsoft Windows 7, 8.x, 10, all 32- and 64-bit editions; or Microsoft Windows Server 2008R2, 2012, 2016; or Mac OS X 10.5 and higher (the teacher module only).

Virtual Machines (Microsoft HyperV, Oracle VirtualBox, VMWare) with one of the specified above operating systems as a "guest" system.

Terminal sessions (RDP, Multipoint Server, nComputing).

1 GHz or faster 32-bit (x86) or 64-bit (x64) processor; 1 GB RAM (32-bit) or 2 GB RAM (64-bit); 100 MB of free disk space.

100 Mb/s wireless or Ethernet local network.

A. Installation with standard installation package

To understand the basic principles of Net Control 2 Classroom configuration, we recommend to read this chapter even if you are planning some other ways of installation.

We recommend to install the software on teacher computers first. It is not required though.

The installation package is intended for installation of teacher and student components in any combination (i.e. only teacher components, only student components, or both). The kind of installation is configured in the process of setup.

1. Run the Net Control 2 Installation Package (most often net1200r.exe).
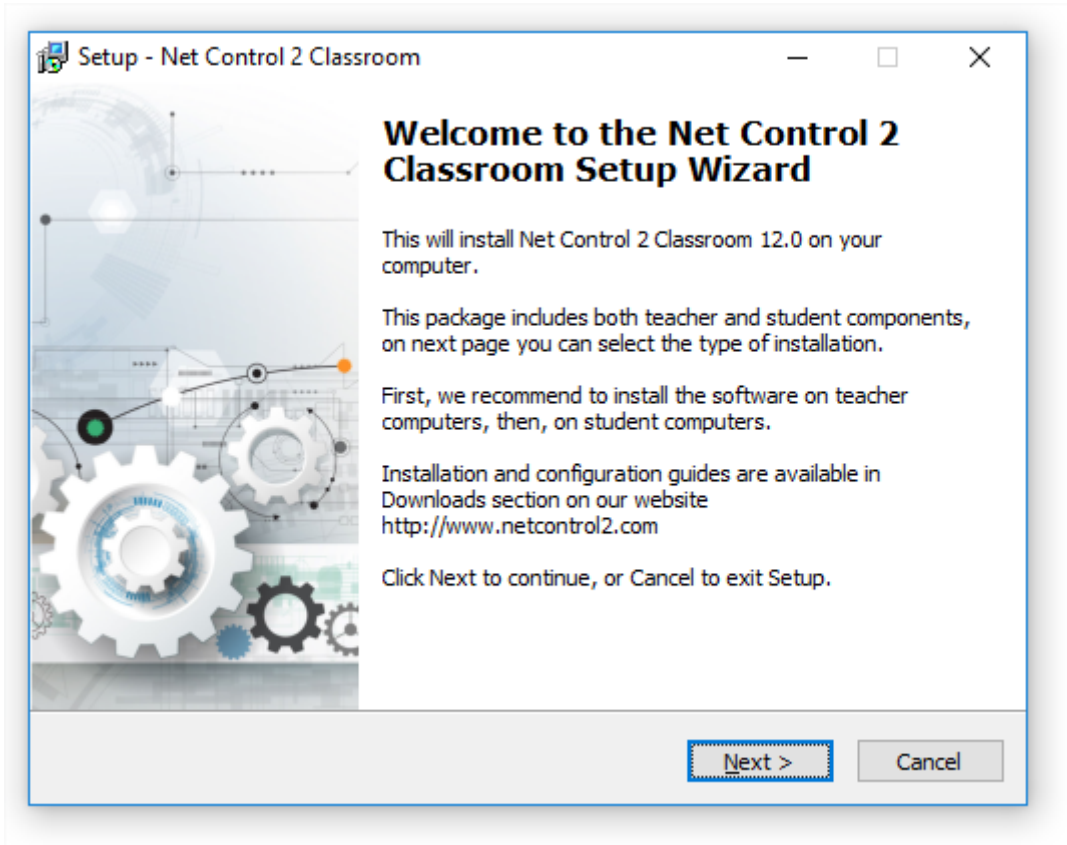
2. Read carefully and accept if you agree the End-User License Agreement.

3. Select Components

On the **Setup Type** page select the necessary components for installation:

http://www.netcontrol2.com
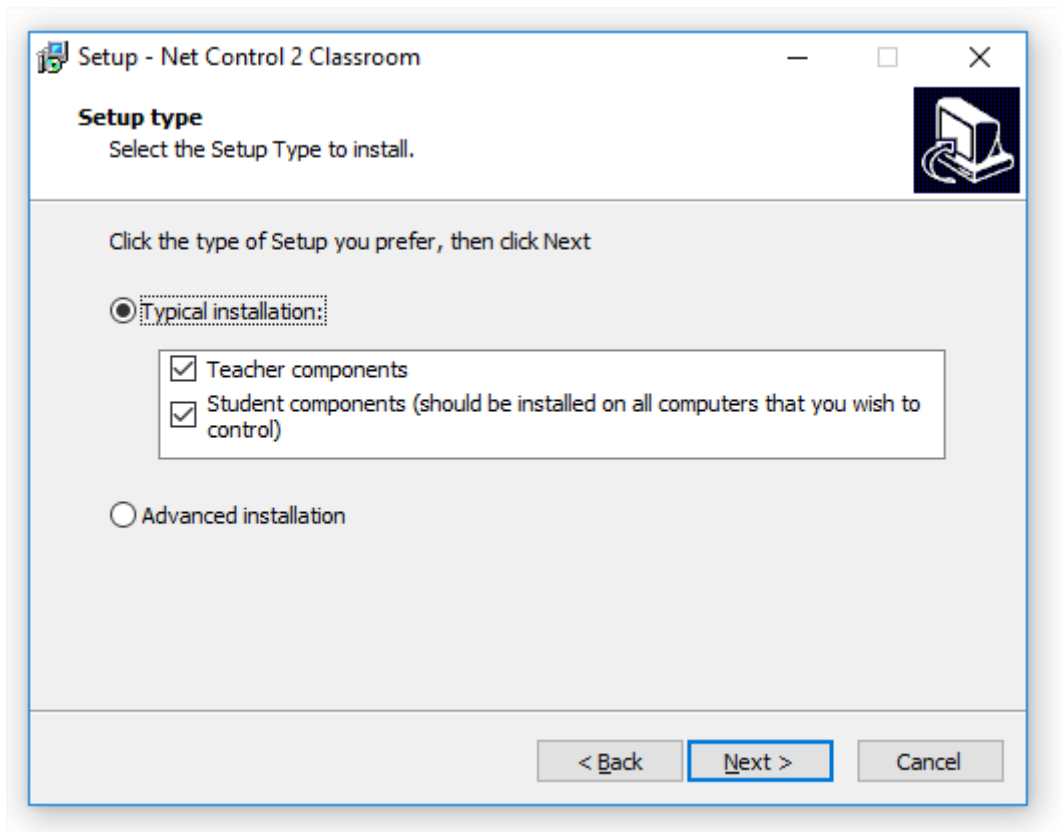
- most often you need to use the **"Typical installation"**;
- select **Teacher Components** if you are installing the software on <u>a teacher computer</u>;
- select **Student Components** if you are installing the software on a student computer, or if this computer should be controlled remotely from another teacher module.
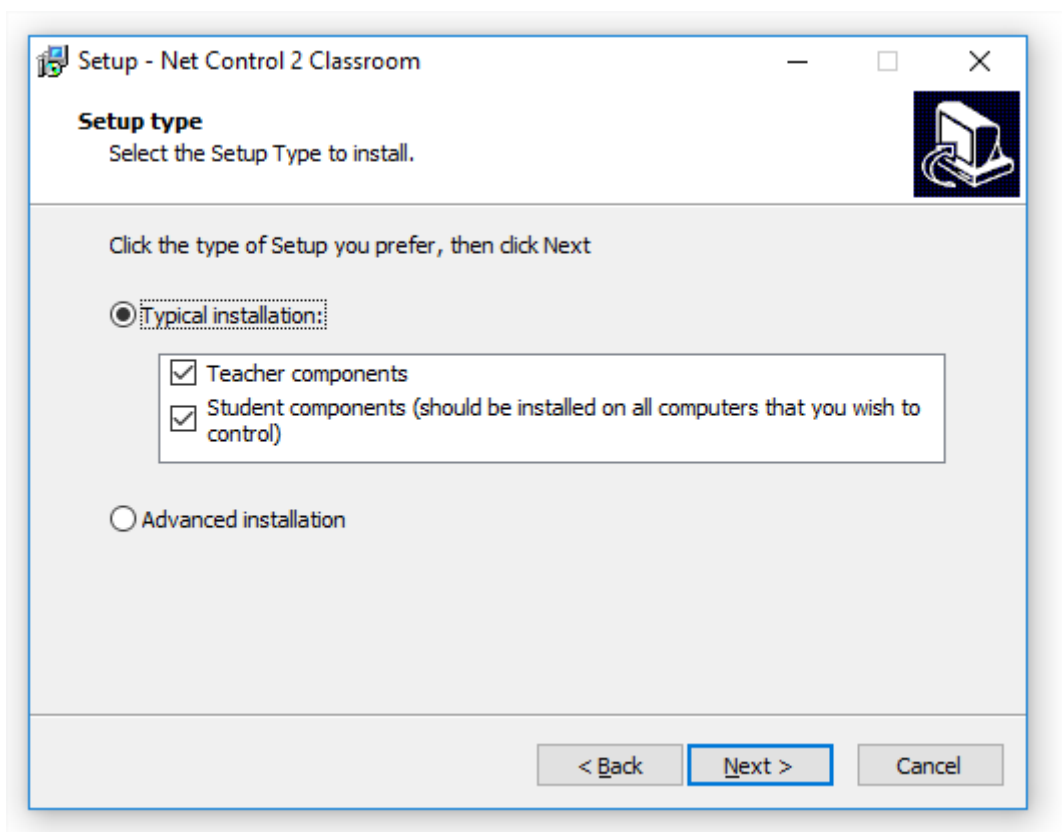
<u>**TERMINAL SERVER ONLY:**</u> If you are installing the software on a terminal server, one installation is necessary for all sessions of the server. Installing teacher components on a terminal server, you are making them available for all users in all terminal sessions. If you need to limit access to the teacher module from student sessions, we recommend to set up a teacher password for the teacher console after installation, alternatively you can change Windows access privileges for the teacher module file (<u>teacher.exe</u> file in *C:\Program Files [(x86)]\Net Control 2 Classroom* folder, may be changed in the process of installation). Only one teacher module may work within one terminal server.

4. **Select a path to the installation folder.**

5. **Network computer name (Teacher module installation only).**

   If you are installing the software on a teacher computer (teacher components are selected), the setup program will display a network computer name for this computer:
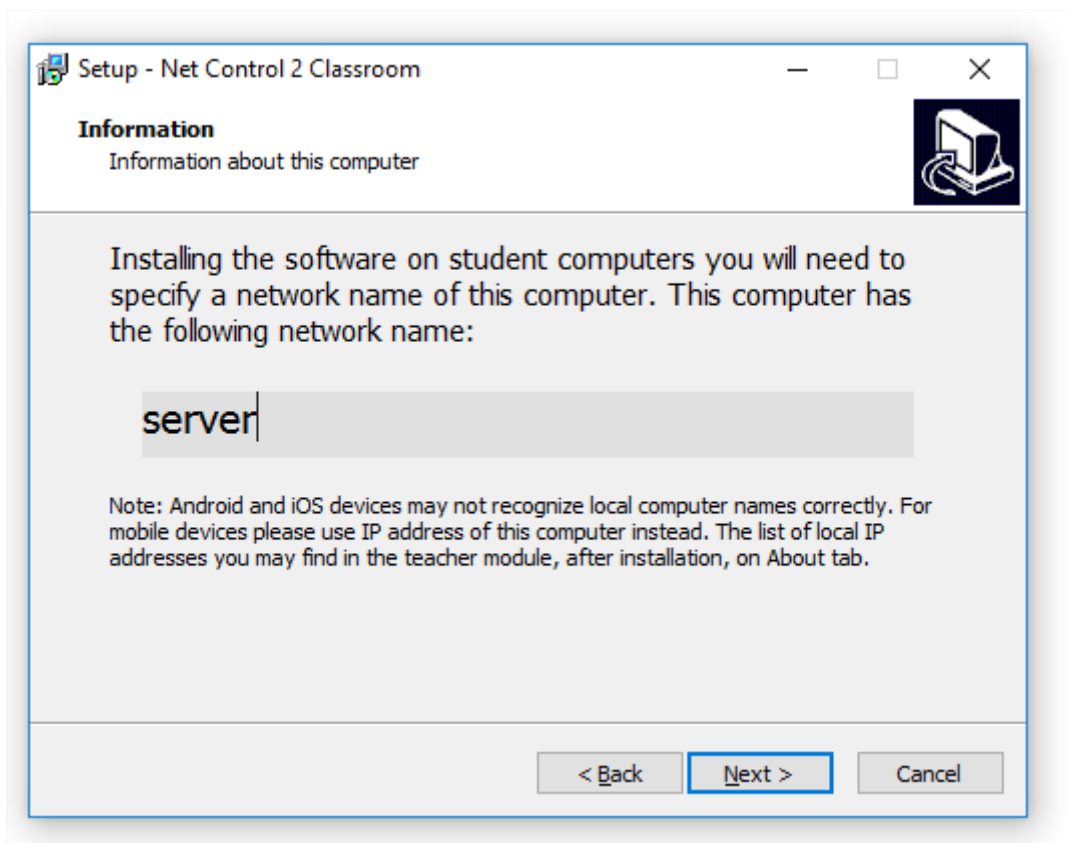
   This information is provided for your reference only, but you may need it when you will install the student components on student computers.

   If necessary after installation, you can find your teacher computer name and IP addresses in the teacher module on About tab (**IP address and DNS name** button):

6. **Group name**
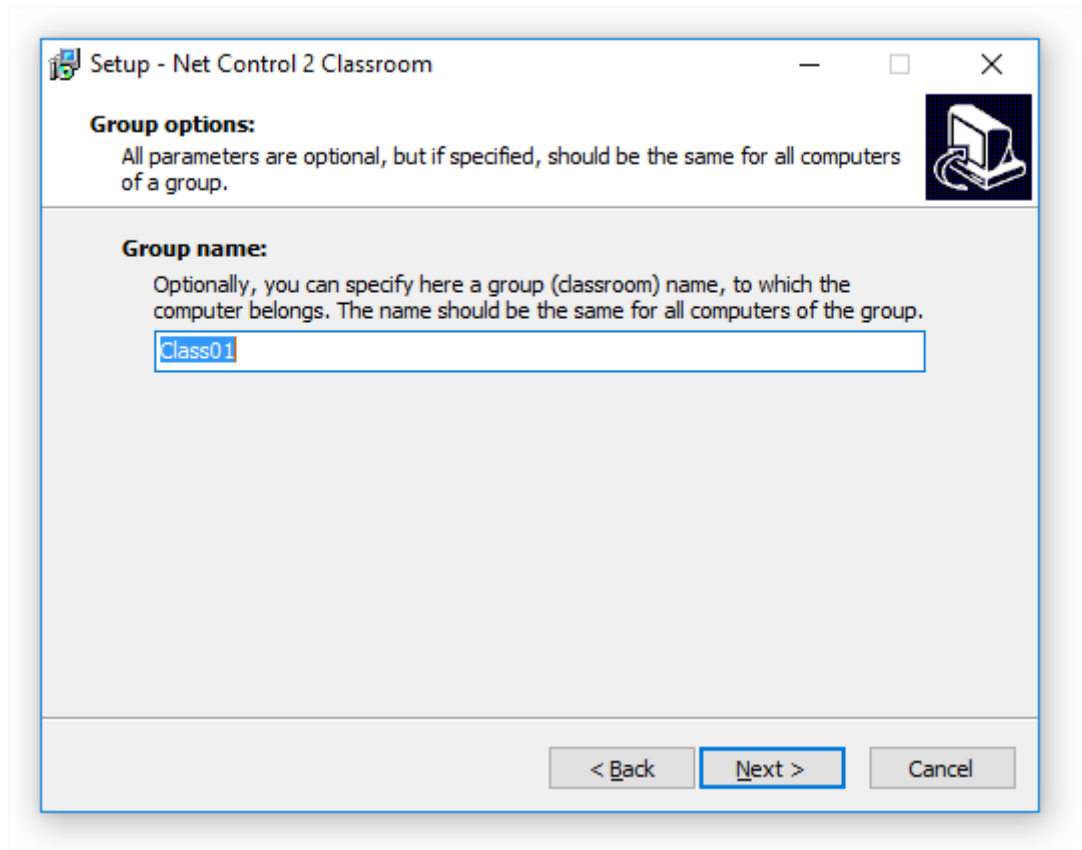
Net Control 2 Classroom may be used in an environment that consists of several individual classrooms, and therefore the software allows dividing student computers to groups (virtual classrooms).

Each teacher can work with one or multiple groups.

Each student computer belongs to one group only. And by default, when it is not configured specially, all students belong to the group "Default".

It is important to keep the same strategy for all computers of one group, assigning them the same group name and other connection parameters. Otherwise, incorrectly configured student computers may be invisible for teachers.

The most common situations are described below.

http://www.netcontrol2.com

- If the software is used <u>within one classroom only</u>, one teacher works with a permanent set of student computers; as also students are controlled by one, the same teacher, you may leave the default group settings, do not configure them. In this case all students will belong to "Default" group.

- If you have <u>several classrooms within one local network</u>, student computers should be connected to one or several teacher computers, we recommend to set up a unique group name to each group of student computers (a classroom or class). Please keep the same name for all computers of one group.

- For the teacher module only. If one teacher computer may work with multiple groups (classrooms), installing the software on a teacher computer, in Group Name field you may leave "Default" group name or specify a name of any group; other groups will appear in the list automatically.

- If students are moving from one classroom to other, it is impossible to join them to a permanent group, like a class, or a group them per some other criterion, it is still possible to connect them to a teacher using search features. For additional information please refer to Chapters D and E of this manual. In this case, you may leave a default value for the group name.

- More complex grouping features, like assigning a student computer to multiple groups, grouping students by a Windows login name etc., are available in Net Control 2 Professional Edition.

If you have set up an incorrect value for Group Name for student computers, it is always possible to change settings after installation, remotely from the teacher module, if you have remote access to the student computers in your teacher console (select student computers in the teacher console, then click **N – Options – Client Options** the main menu command); or if you don't have remote access to the student module, on the student computer click Net Control 2 icon in the System Tray (area beside of system clock)

and then click Configure button in the appeared Student Console. Group Name field is on Connections tab of Net Control 2 Client Configuration window:
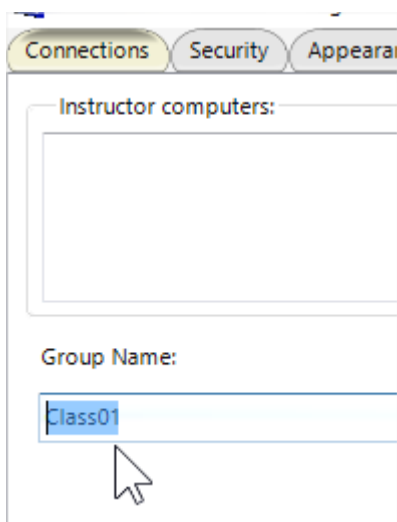
More information regarding student module settings that may be changed after installation is available in Chapter F of this manual.

7. Student module installation only: addresses of teacher computers.

Installing the software on student computers, at next step you will need to enter an IP address or a network name (DNS name) of all teacher computers that should have access to this student computer.

By default, you can specify up to three addresses, if you need to set up more teacher computers, click More button and specify as many teacher computers as you need, one address per line.

Use IP addresses for addressing teacher computers only if your network uses static IP addressing (at least for teacher computers). Otherwise, please use network names. If your network uses a domain, it is preferred to use the name in a fully-qualified DNS format, e.g. **teacher.mydomain.local** . Installing the software on teacher computers, the setup program displays a computer name of the teacher computer on Information page (please see p.5 above), you can use the discovered computer name at this step.

If you made a mistake in the process of installation, you can change parameters on student computers at any moment, configuring them in Net Control 2 Client Configuration window, on each student computer, as described in the previous paragraph, in **Instructor Computers** section of **Connections** tab**.**

8. Search options and Connection Password (Student module installation only).
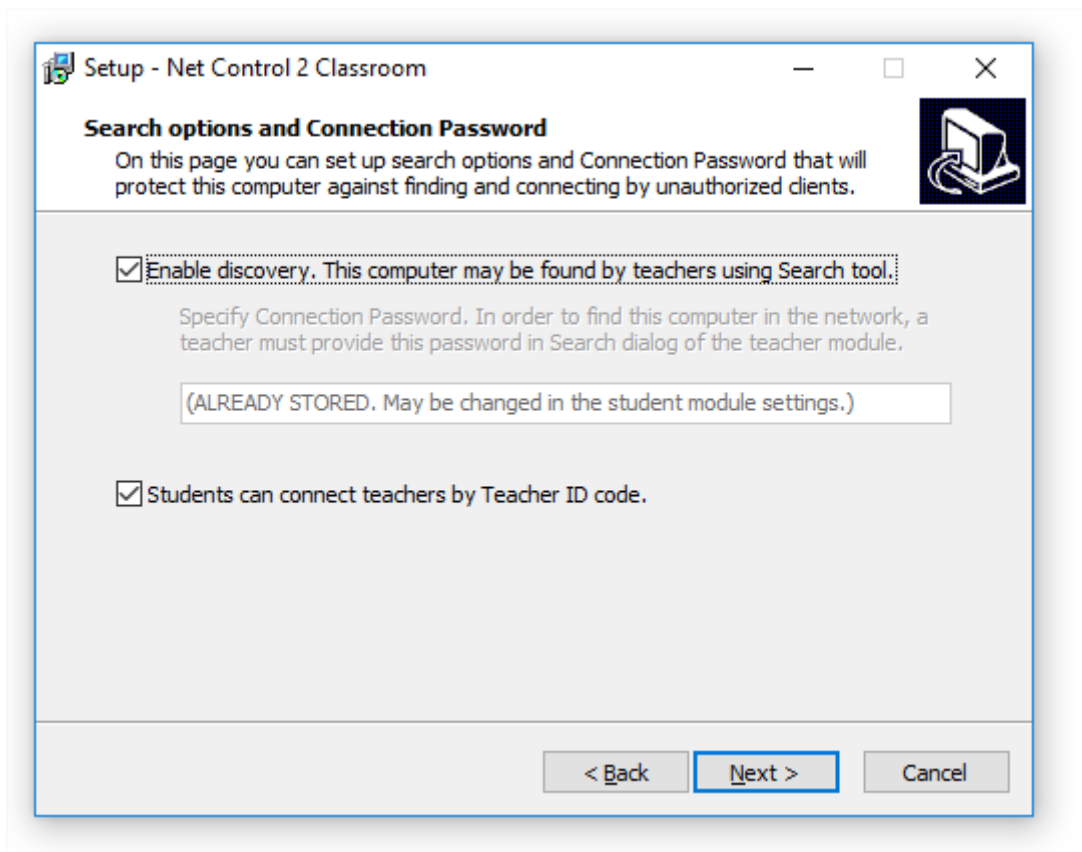
If you have not configured all teacher computers in the previous paragraph, or if you need to give teachers ability to add students to the group permanently or temporarily (for a lesson only), you can enable discovery for this student computers.

When enabled, teachers will be able to scan the network for available student computers and add them to the connections list.

Enabling this option, for security reasons, you must set up a connection password. Teachers that do not provide this password in the search dialog on their computers, will not be able to find and connect this computer. We recommend to set up the same password for a group of computers (e.g. a classroom), because searching computers in the network a teacher can specify only one password at a time.

Alternatively, or in addition, you can enable the searching teachers by students feature. In this case, students will be able to connect a teacher themselves, by a special teacher ID code that a teacher provides to students. For more information regarding this feature please refer to chapter E.

9. **Additional options (student module installation only).**
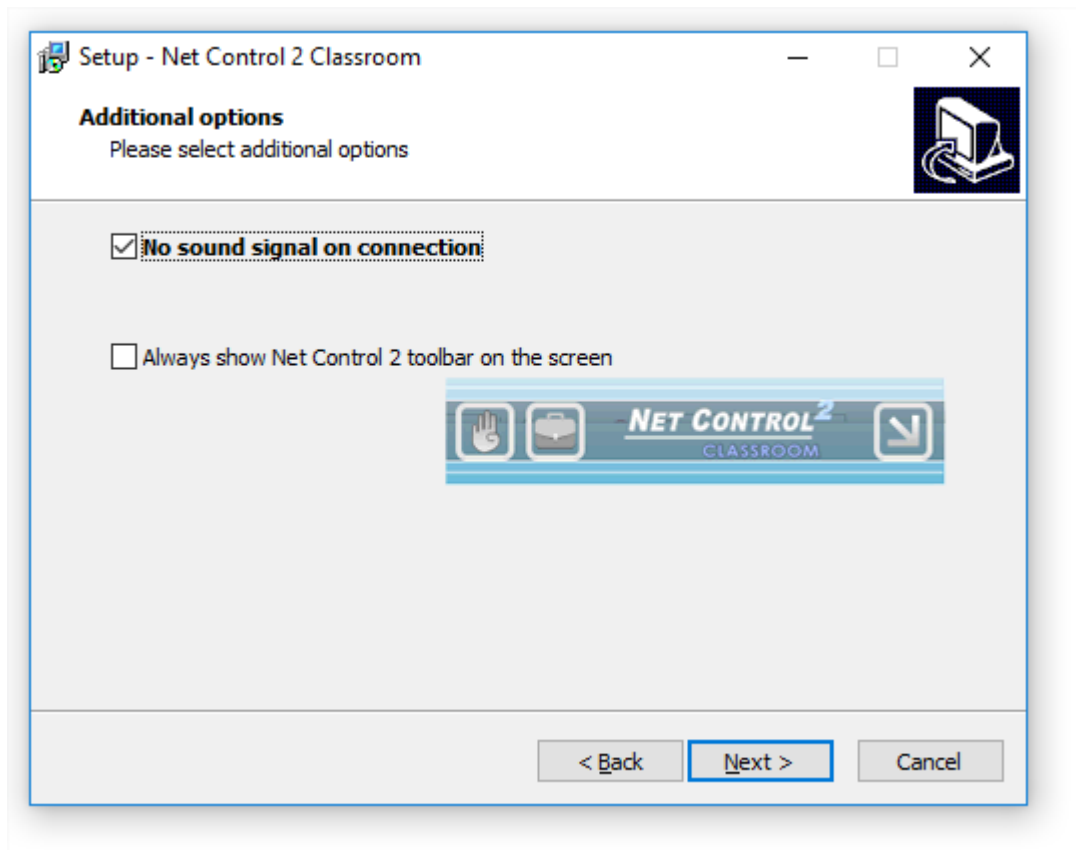
No signal on connection – when it is not enabled, the student module will alert with a sound signal and text notification when a teacher computer is connecting to it. Enable this option to suppress the sound signals and leave text notifications only.

Always show Net Control 2 toolbar on the screen – when enabled, the student module will display Net Control 2 Student Module toolbar on a screen of the student computer. The toolbar **is always present** on the screen as a popup window in the top area of the screen. The toolbar provides quick access to "Raise hand" and "Lesson Resources" features of the student console, as also quick access to Student Console itself.

10. **Teacher module configuration (for teacher components only).**

On "Configuration Options" page you can set up how the teacher module will store its configuration:
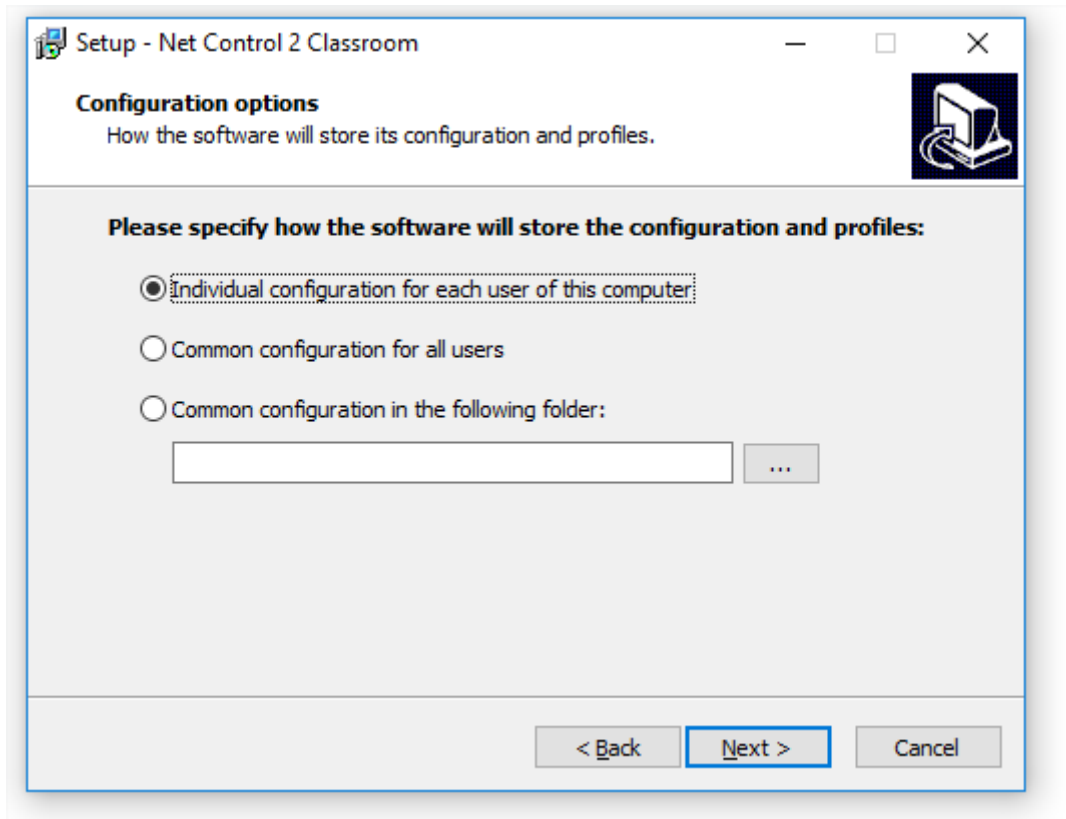
Individual configuration for each user of this computer – the workspace, profiles, settings and Net Control 2-related documents will be individual for each user of this computer and stored in a personal folder of the user, for example:
"C:\Users\[*Your_Login_Name***]\AppData\Roaming\Net Control 2"** for Windows 7 and higher ("C:\Documents and Settings\LOGINNAME\Application Data\Net Control 2" for Windows XP).

Common configuration for all users– the configuration will be common for all users of this computer.

Common configuration in the following folder – the configuration will be common for all users of this computer and stored in a specified folder. This option is useful if you need to keep the same configuration for teacher modules on several computers in a shared network folder.

11. **Broadcast Desktop options. (The teacher module installation only).**

Broadcast Desktop tool by default uses special multicast protocols for sending data over network to multiple recipients, this allows keeping a minimum bandwidth use, but makes possible an interference between several teachers, broadcasting on the same network port over the same network.

To exclude the possible interference, you need to set up a unique broadcast desktop channel for each teacher module. If you have only one classroom in the network, the default value may be used.
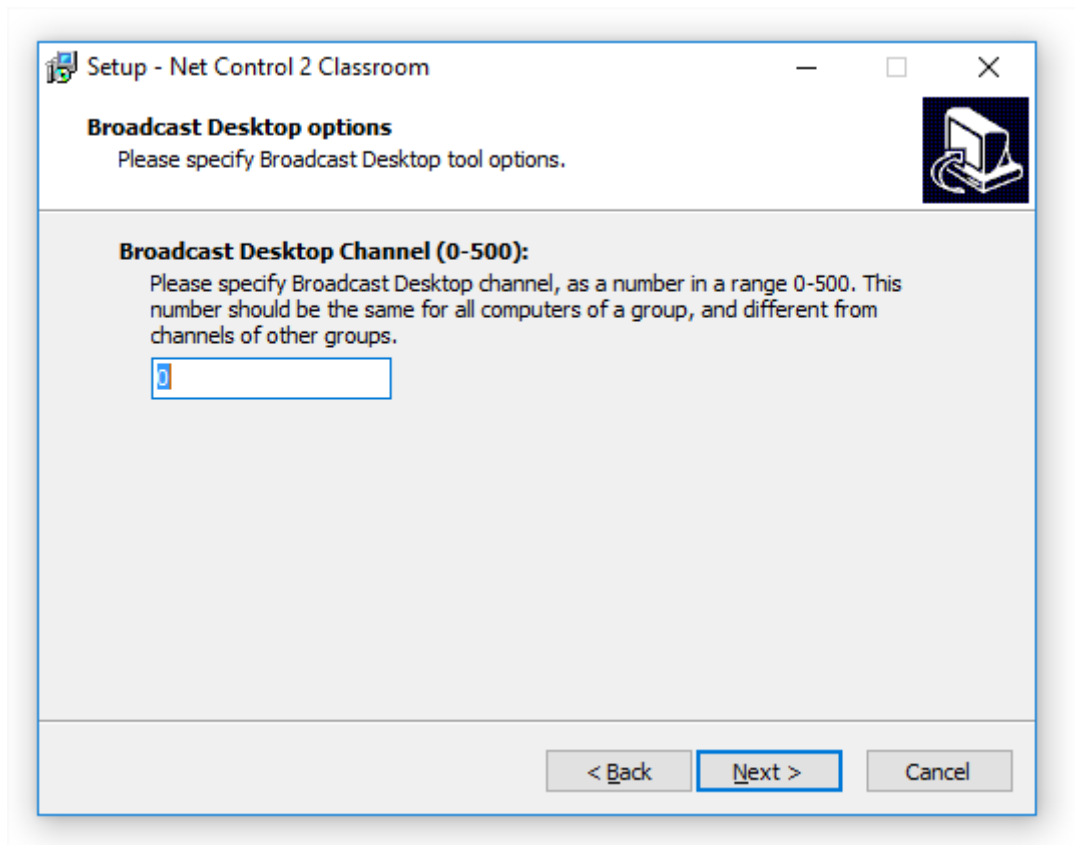
The broadcast desktop channel is a number from 0 to 500 that will be internally mapped then to a unique network port to guarantee that only one teacher uses this network port number at a time.

You need to set up Broadcast Desktop Channel for teacher module installation only.

After installation, you can change the channel and other broadcast settings in the Teacher Console, clicking the main menu command **N -> Options -> Control Options**; on Control/Broadcast page.

12. Additional tasks and options.

The set of options may vary depending on teacher or student module installation.
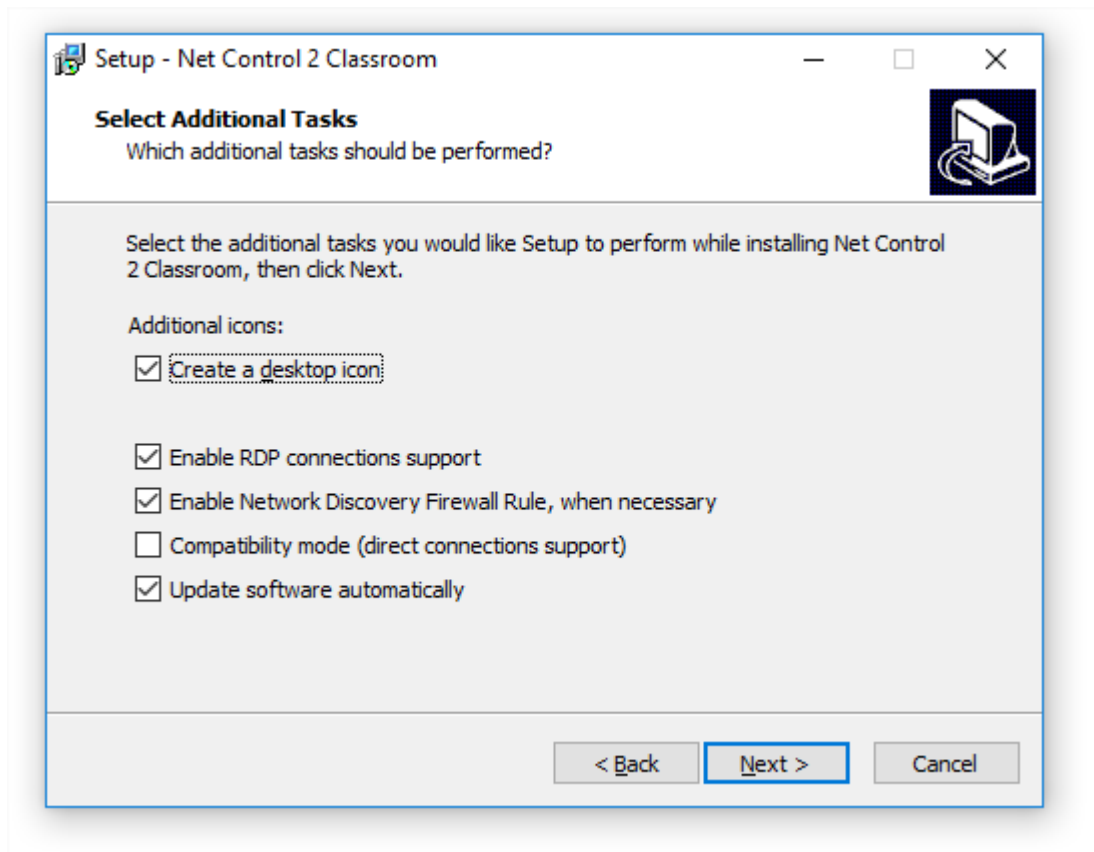
Enable RDP connections support – enabled by default, recommended. When enabled, the student module will support both console (real) and terminal (remote) login sessions. Each user login session will be displayed in the teacher console as a separate connection ("computer"). This option is required for use with Terminal server or nComputing connections. Disable this option if RDP sessions should be invisible in the teacher console.

Enable Network Discovery Firewall Rule – enables the Network Discovery rule of Windows Firewall in Windows 7 and higher. This rule is required for connectivity between computers in a local network and is enabled by default for "private" and "work" network profiles of Windows Firewall.

Compatibility mode (direct connections support) – not recommended for new installations. Turns on direct connections mode for the teacher and student modules. Direct connections were used in previous versions of Net Control 2 Classroom and this option left for compatibility reasons. If you need to use Net Control 2 Classroom version 12 in an old environment.

Update software automatically – enables automatic update of the software over the Internet. When enabled, Teacher Component will check the update server every 14 days for available updates, download, and install them automatically when necessary. This feature is available in the software for registered users only.

13. Restart the computer after installation.

http://www.netcontrol2.com

B. First start.

To run the teacher module use Net Control 2 Classroom icon on Desktop or in Start menu – All Programs – Net Control 2 Classroom folder.

At first start the teacher module will prompt you to choose the User Interface type: Basic View or Advanced View.
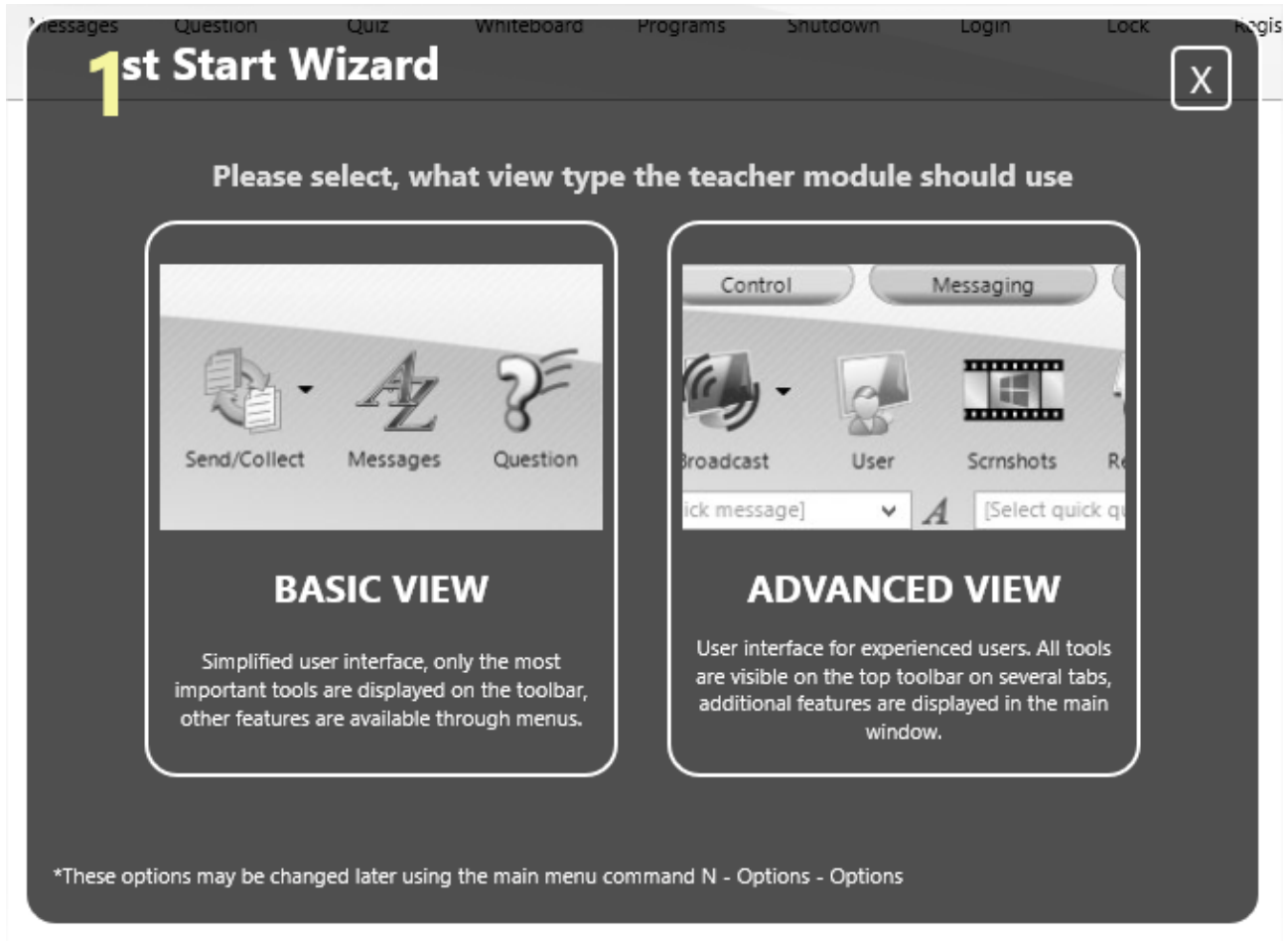
When the Basic View mode is selected, to simplify the user interface, the teacher module will hide several tools on the top toolbar and turn off several administrative features. The hidden tools are still available through a special All Tools button and in the main menu (N – All tools).

The top toolbar in Basic View:
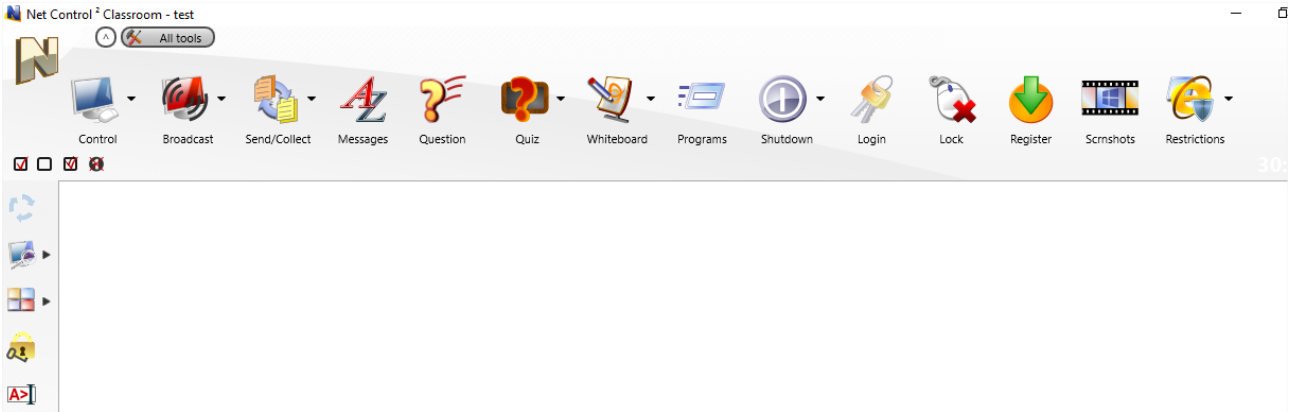
The 14 most important tools are grouped on one page of the top toolbar, other tools are available in All Tools button menu.

The top toolbar in Advanced View:
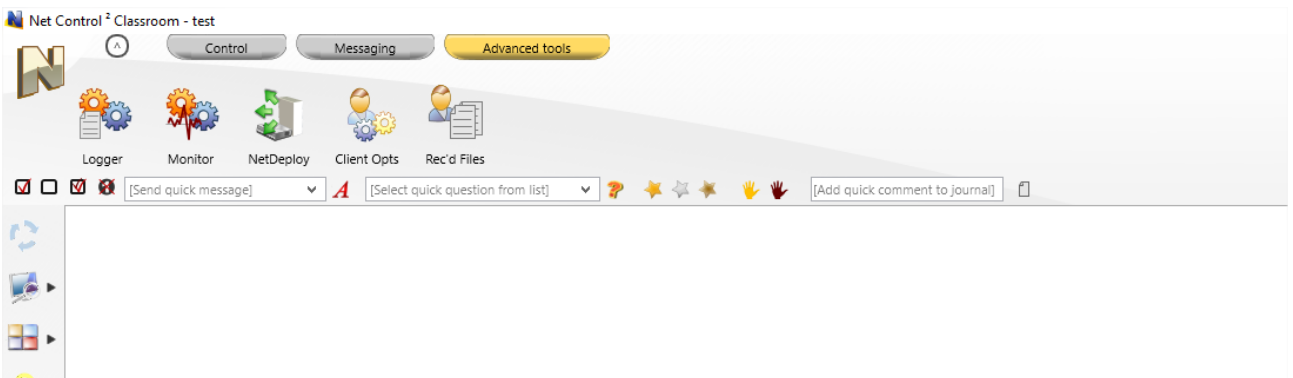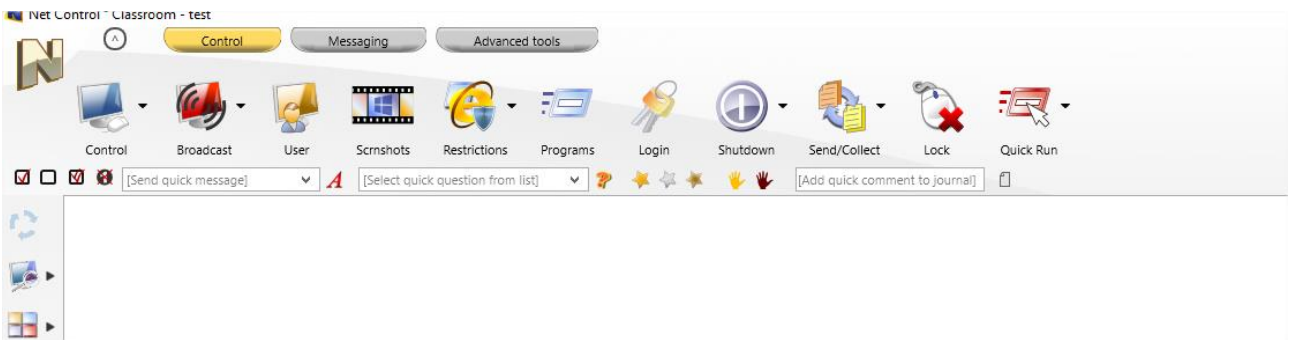
In the Advanced View mode, 30+ tools are grouped on three tabs, additional controls for quick sending messages, polls, adding comments to the journal, and other features are displayed at the bottom of the top toolbar.

You can change the view type later, at any moment, using the main menu command **N – Options – Options, Interface** page, **"Simplified Interface"** slider.
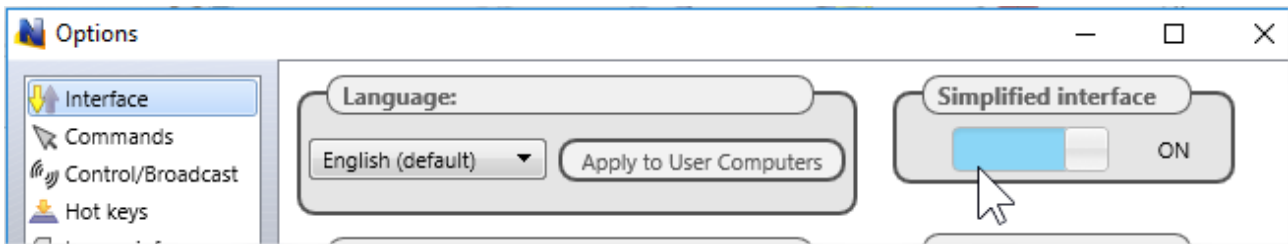
At next step, after selecting the view type, you can choose the way how the teacher module will handle connections.

Net Control 2 Classroom version 12 introduces a new way of storing and displaying student connections.

The new interface (**"YES"** button) assumes that student connections will be always displayed in the group, even if they are turned off at the moment. This helps to keep the same order and position on the screen for connected and unconnected computers in the teacher workspace. This mode is recommended.

In previous versions, all inverse connections were dynamic, i.e. appeared in the teacher console only when a connection with a student was established and disappeared automatically when the connection was closed or the student computer was turned off. To enable this mode, click **"No"** button.
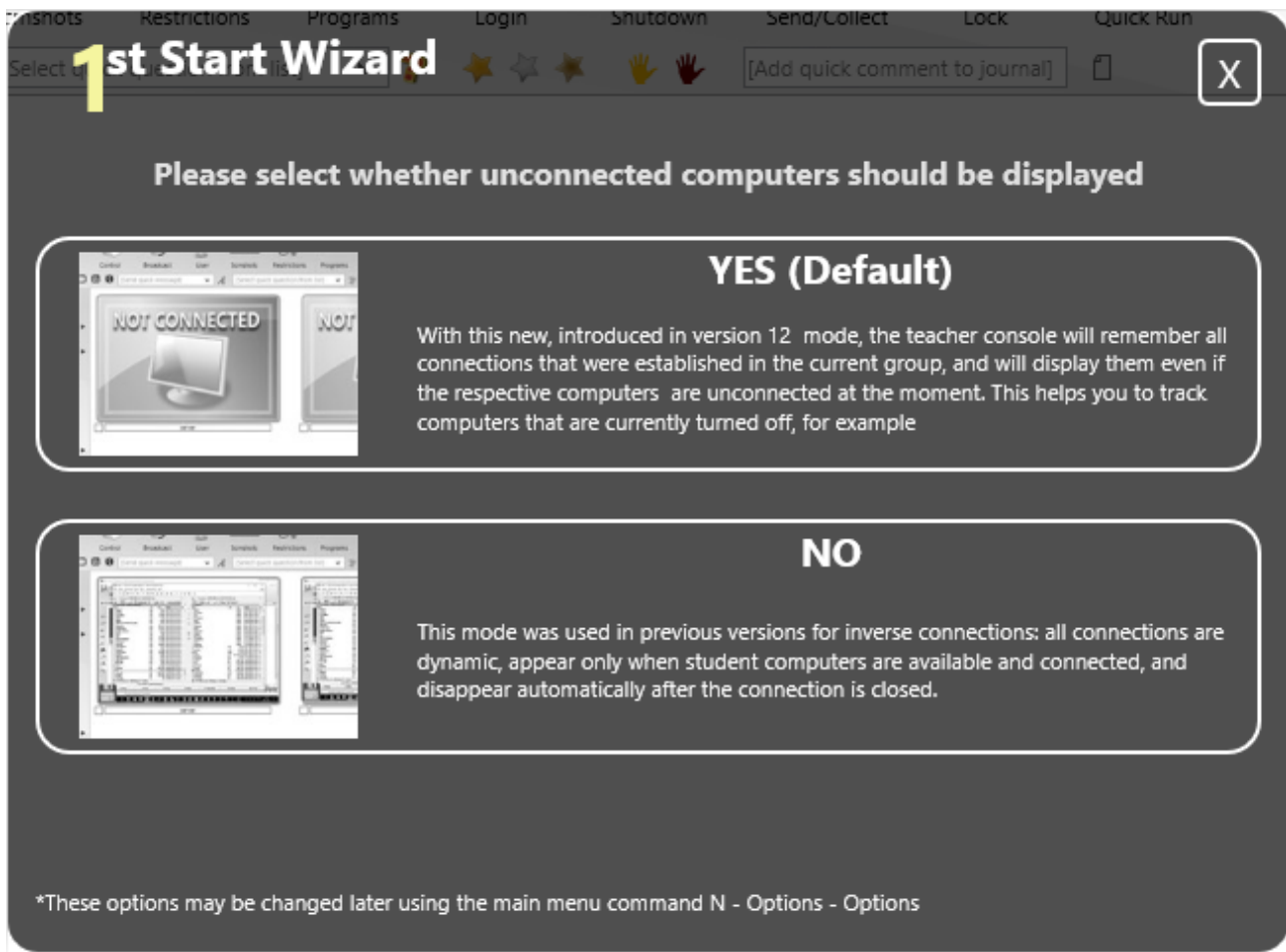
To change this behavior in future, please use the main menu command **N – Options – Options**; **Interface** page, **"Show unconnected computers"** option should be enabled for the new mode, or disabled for the old mode otherwise
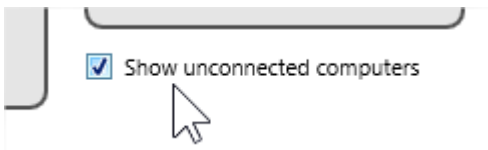
Please note, the teacher module displays the **"1ˢᵗ start"** dialog only once for each user of the computer, after you select one of the available modes, the window will not appear next time you are running the teacher console.

C. The teacher console

At the teacher module start up, it may display a prompt to enter the lesson details:
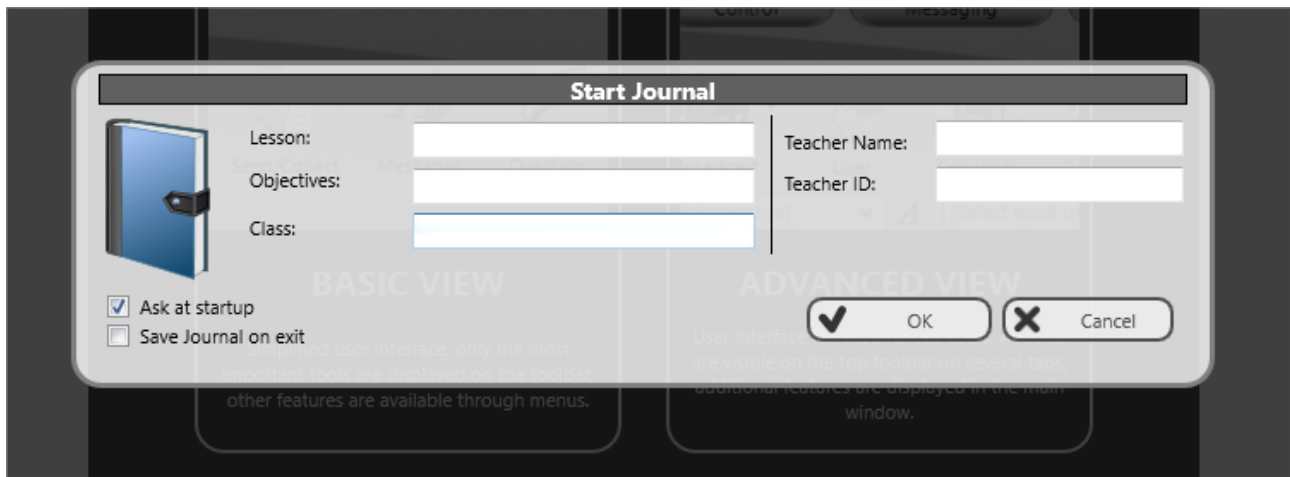
These details are optional, are necessary for keeping the lesson information in the Journal, and will be displayed on student computers in the student console.

You can uncheck "Ask at startup" option to prevent appearing this window at next start. The entered Teacher name, ID and Class will be stored and used for next lessons.

At next step you may see an empty workspace:
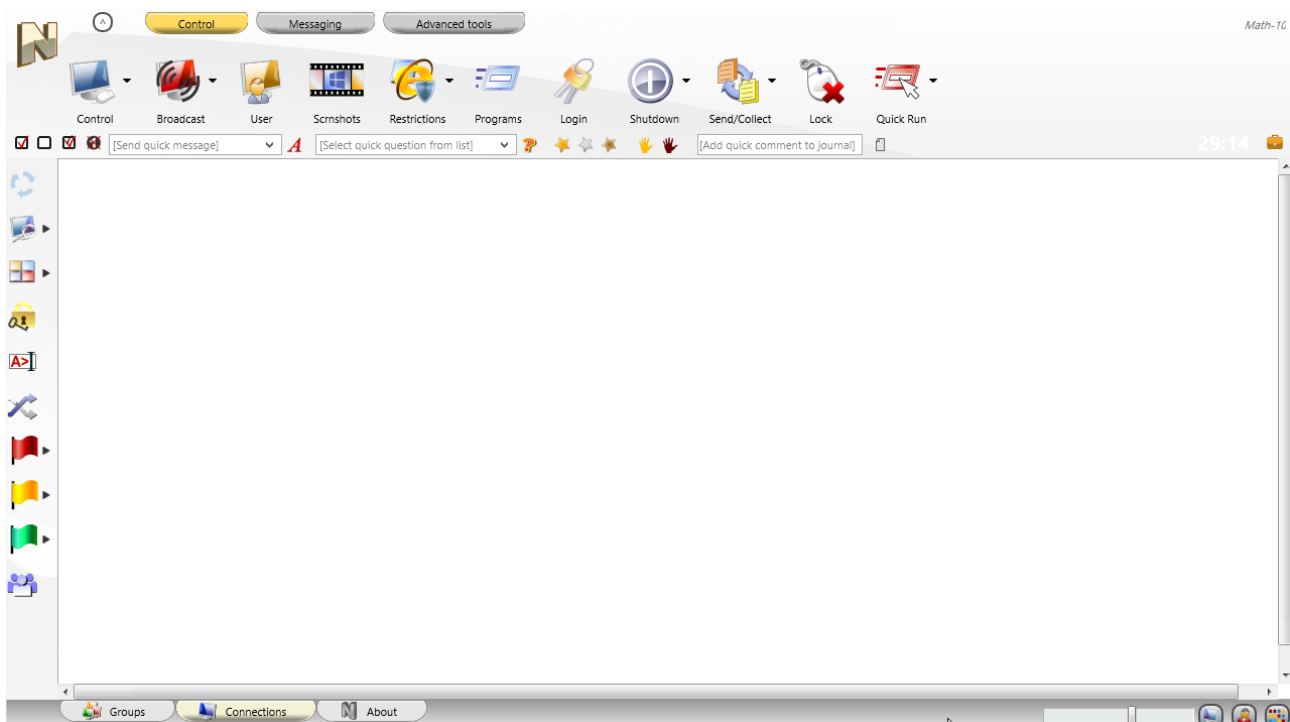
If student computers were configured correctly, and a correct group is opened in the teacher console, student connections should appear in the teacher console in 15-30 seconds.

The actual group name is displayed in the bottom-left hand corner of the teacher console:
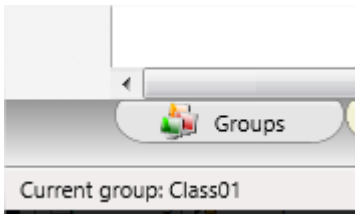
If student computers were assigned to different groups, the available groups will appear in the teacher console, on "Groups" tab. To open this tab, use controls at the bottom of the teacher console:
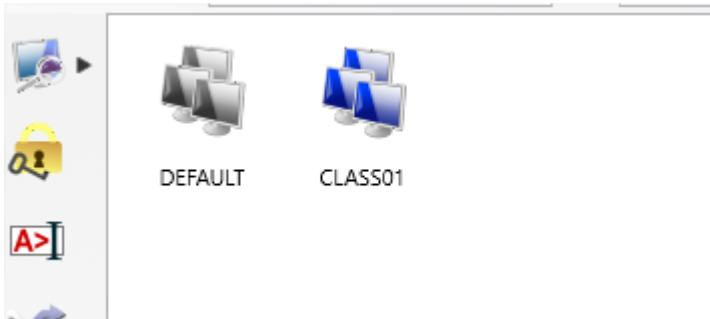
To open a group, double click the respective icon.

New groups appear in the teacher module automatically only if the respective student computers were configured to connect this teacher computer.

If connections do not appear in the teacher console within 15-30 seconds, please check that settings on the student computers are correct (the teacher computer IP address or DNS name is correct and group name is the same as used on the teacher computer); local third party firewall (network security or anti-virus software) on the teacher computer does not block incoming connections.
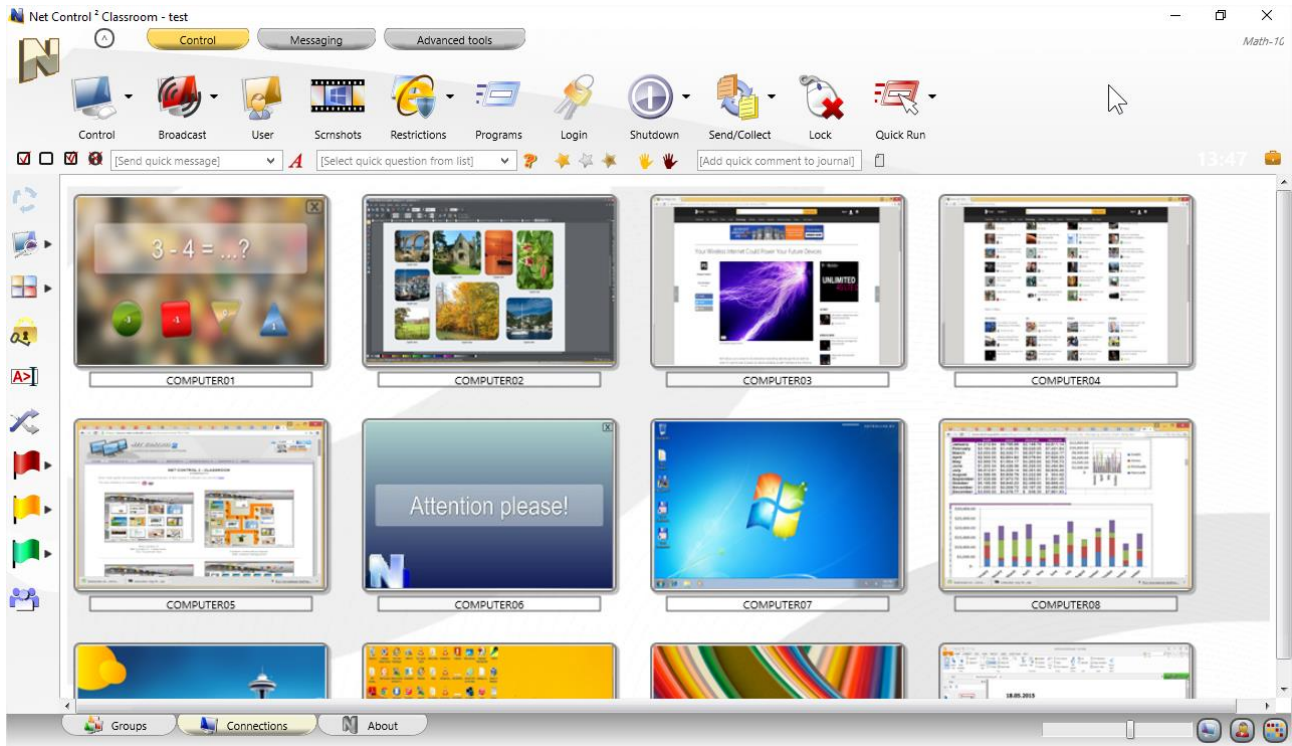
Now you can select one or several connections and apply commands and tools to perform operations. Tools and features that are common for all editions are described in the **Tools and Features Guide,** you can download it from our website at
http://www.netcontrol2.com/downloads

By default, connections are named as a combination of:

Computer name (network computer name), if Computer Name View mode is selected (button at the bottom-right hand corner of the teacher console is pressed);

and/or

User name (an alias), if User Name View mode is selected (button at the bottom-right hand corner of the teacher console is pressed). The user name will be displayed as (in order of importance):

- o a student registration name, i.e. a name that students enter in Student Registration dialog (for more information please see Student registration tool), or

- o any custom alias, if provided in the student module settings in "Alias" field on Connections tab of Client Configuration window; by default the alias is not set; or

- o a full user name as provided in the Active Directory database (as "John M. Doe", for example), if available; or

- o a Windows user login name.

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You can rename a connection (the computer name part) right clicking the connection, and then using Modify connection menu command:
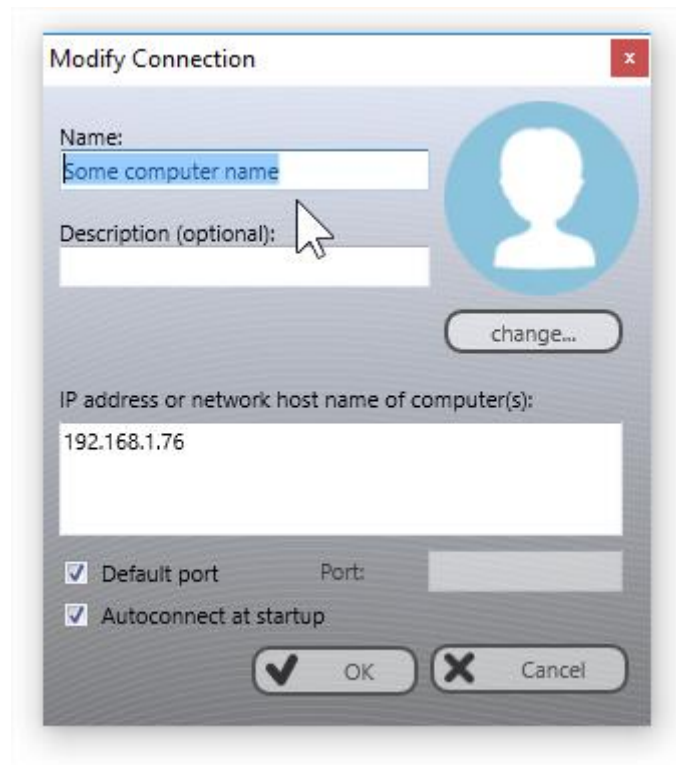
Arranging and sorting connections. Custom layouts.

Except for the Table View (described below), the teacher module may display connections either in arranged order or in custom, user-defined positions:

Arranged view:
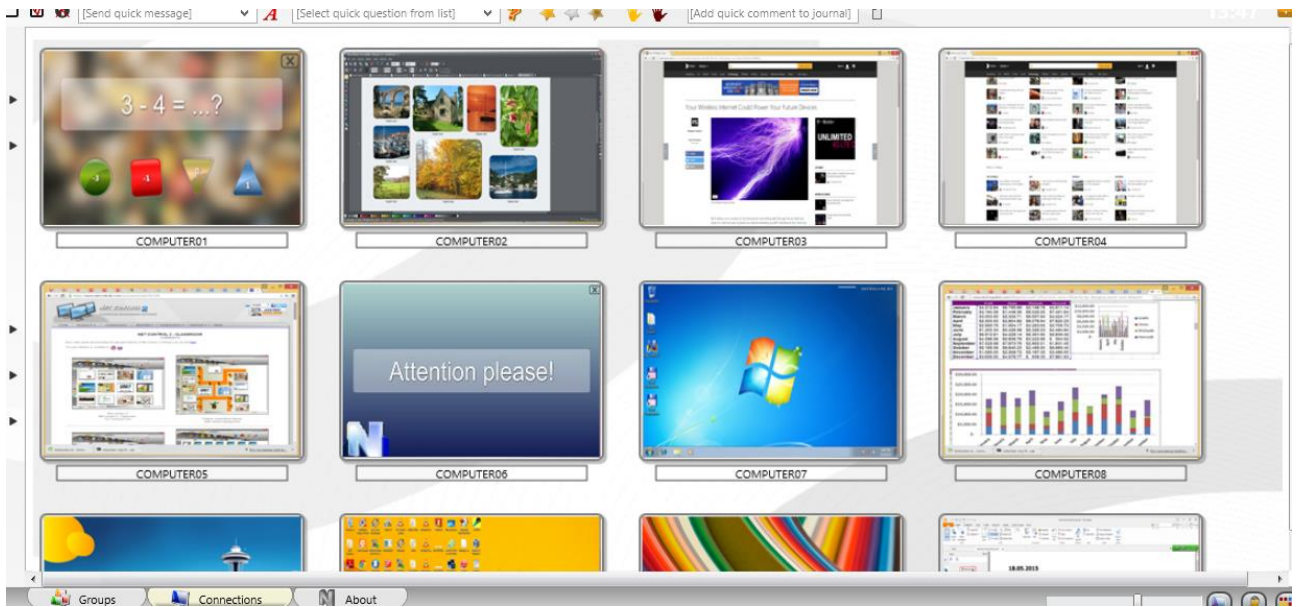
Custom layout:
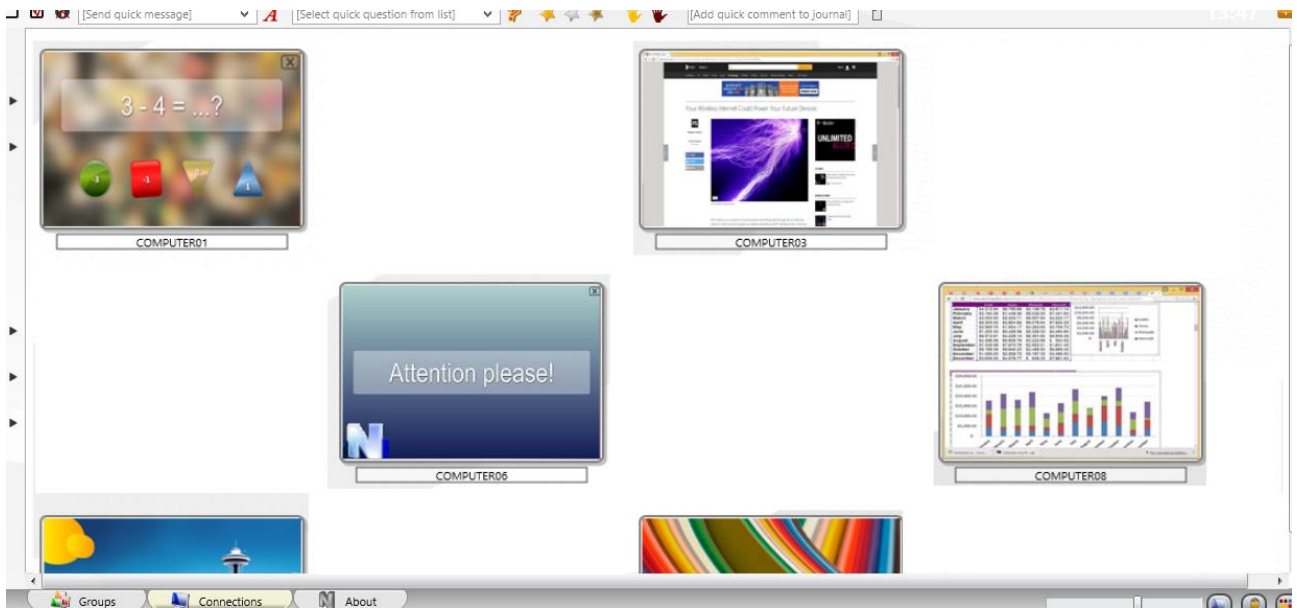
In *Arranged View* connections may be sorted in one of the following orders:
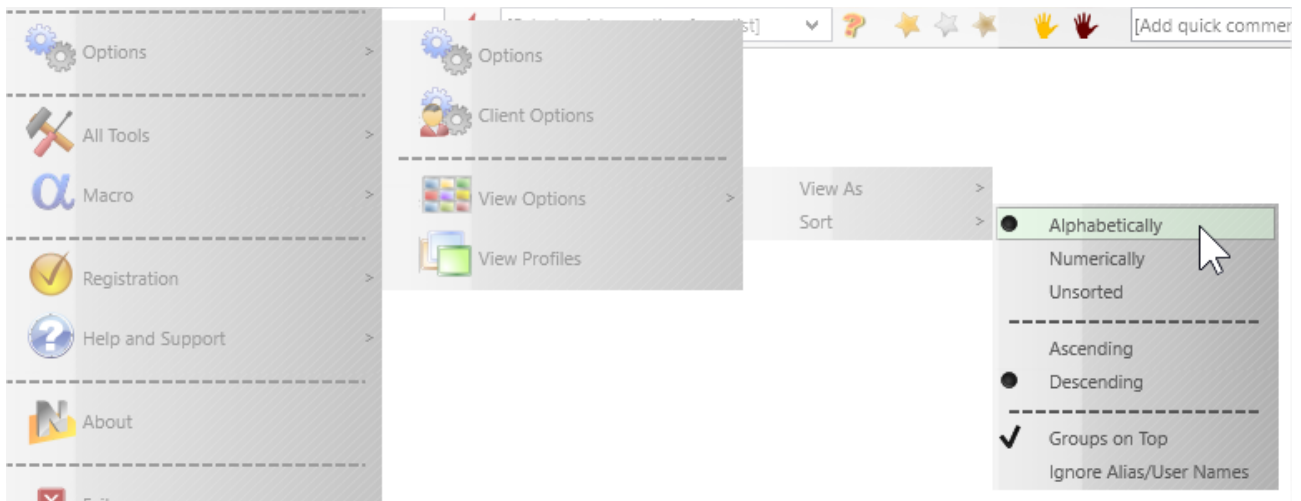
Alphabetically, in descending or ascending order;

Numerically, in descending or ascending order, in this case only the numeric part of a connection name will be taken in account for sorting, e.g. *"Computer0123"* connection will be displayed earlier than *"Auto987"* for ascending order.

Unsorted – connections appear in the order as they are stored in the workspace database.

Groups on Top – places joined (grouped) connections to the top of the list.

Ignore Alias/User Names – when enabled, only the computer name part of a connection name will be taken in account for arranging.

To change the sort mode, use the main menu command **N – Options – View Options – Sort**.

In **Free View** mode, you can position connections in the connections list in a custom order, just by dragging them to a desired position within the connections list. To change Arranged View mode to Free View, please use the following button at the bottom-right hand corner of the teacher console:

After you changed a position of connections in Free View, on closing the teacher module, it will prompt to save the workspace:
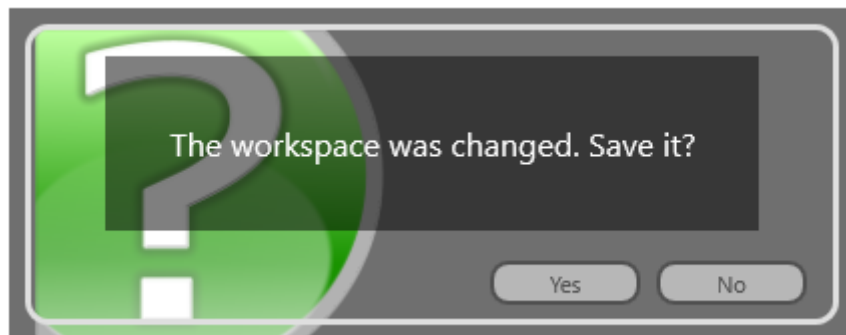
You need to click Yes to save changes.

Custom background

In addition, for both Arranged and Free View modes you can enable a **custom background** image for the connections list. It is possible to use this feature to draw some class layout, for example as shown on the picture:
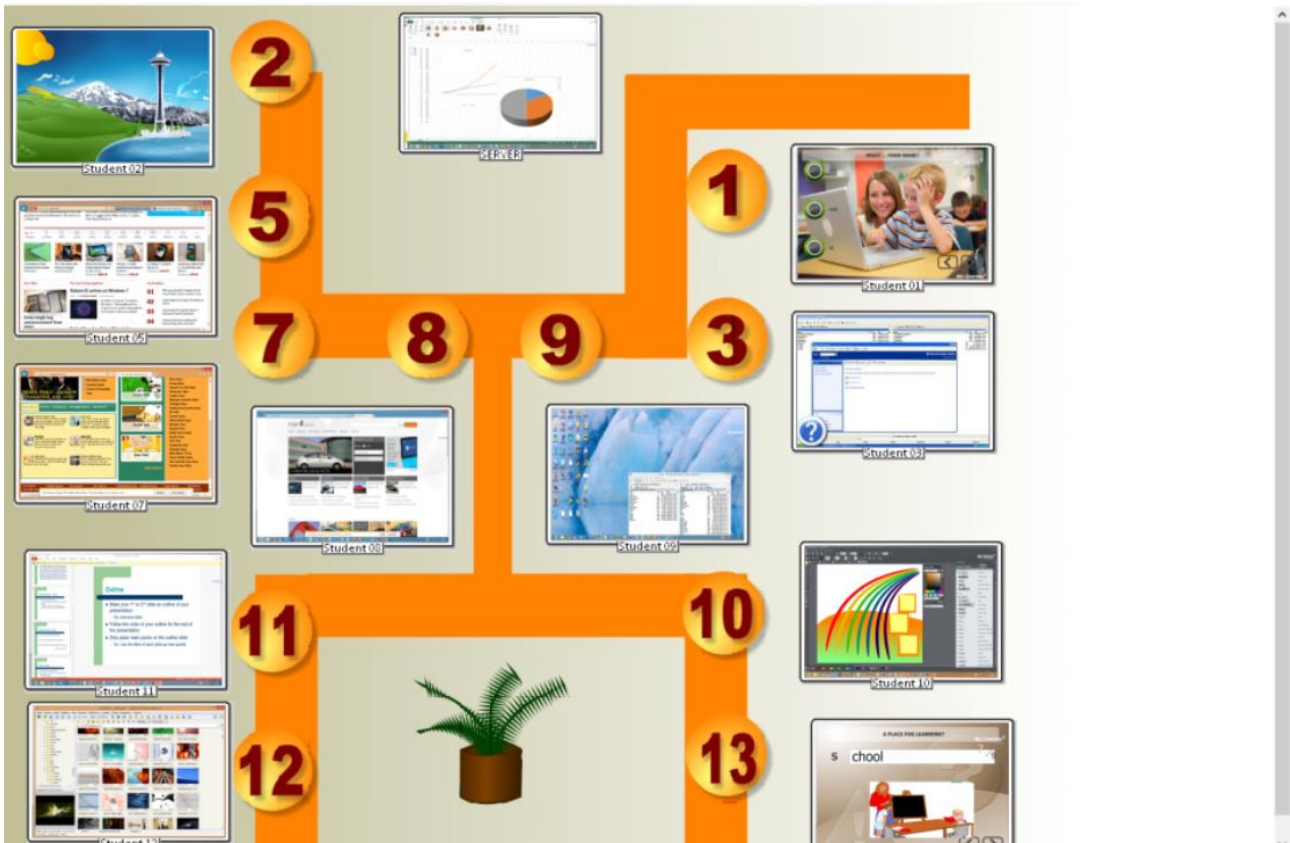
To load a custom background image, in the teacher module click the main menu command **N – Options – Options**; on **Interface** page, in **"Workspace background"** section open a file for the background and click OK.
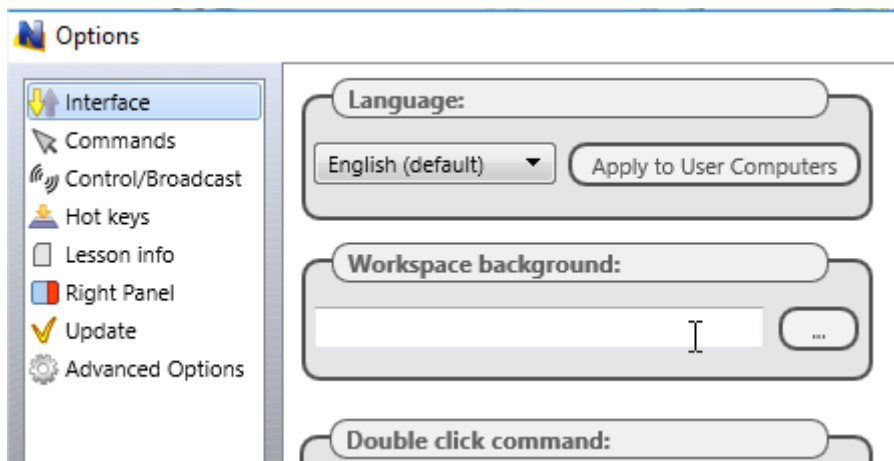
View modes

Net Control 2 Classroom supports five view modes for the connections list:
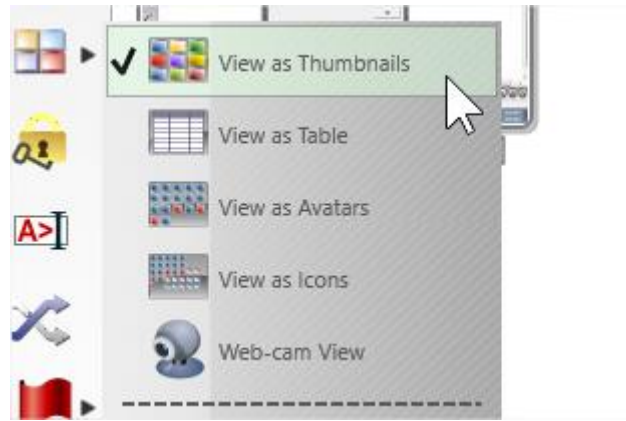
Thumbnails: connections are displayed as desktop snapshot thumbnails,

In this mode, you can see an icon of the currently used application on the student computer (in the bottom-left hand corner), help request buttons, awards, poll answer information etc.

Thumbnail size may be adjusted with a slider at the bottom-right hand corner of the teacher console:
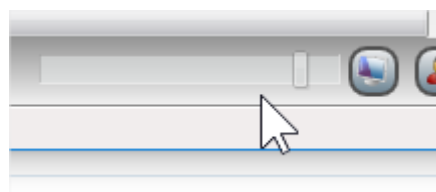
or in the teacher module settings.

The default refresh rate for thumbnails is 15 seconds, i.e. the image will be reloaded every 15 seconds. To change this value, in the teacher module settings (the main menu command Options – Options) on Interface page, adjust "Thumb refresh rate" option, click OK to apply changes:
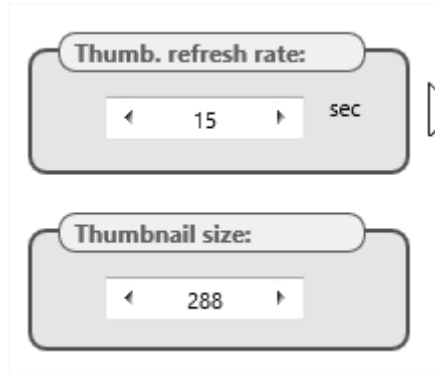
Table: the connections list is displayed as a table, each line represents one connection, in this view mode you can see connection and user names, IP address or DNS name of the remote computer, awards, help request, description, remote platform information, MAC addresses of the remote computer, other information:

	Name	Alias	Address		Description	Platform	StudID
☐	computer02	tester	192.168.1.76 RDP#1	⭐		Windows 7 Service Pack 1/11.1.1.632	
☑	computer01	user	192.168.1.22 RDP#2			Windows 10 /12.0.0.515	

Avatars: connections in the list are displayed as avatars, for any connection you create an avatar with the built-in editor or assign a custom image from a file.
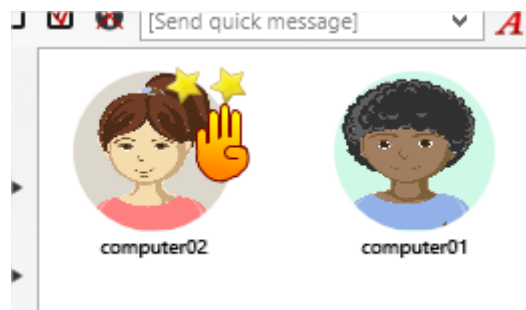
To change an avatar for a connection, right click it in the connections list, use **"Modify connection"** context menu command. In the appeared window click **"Change"** button below the avatar image.

http://www.netcontrol2.com
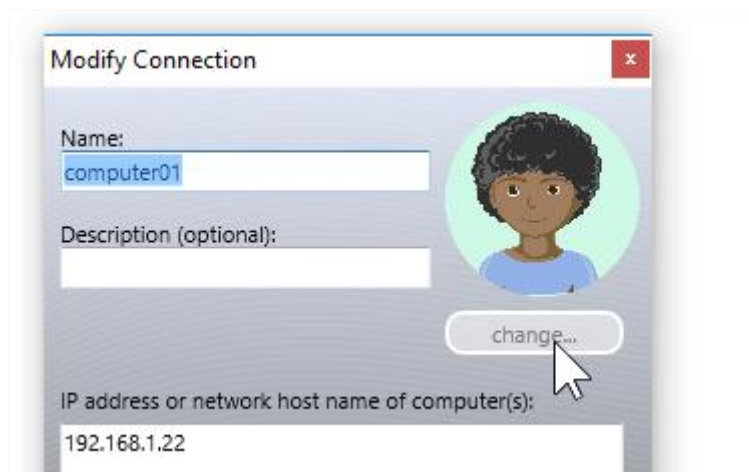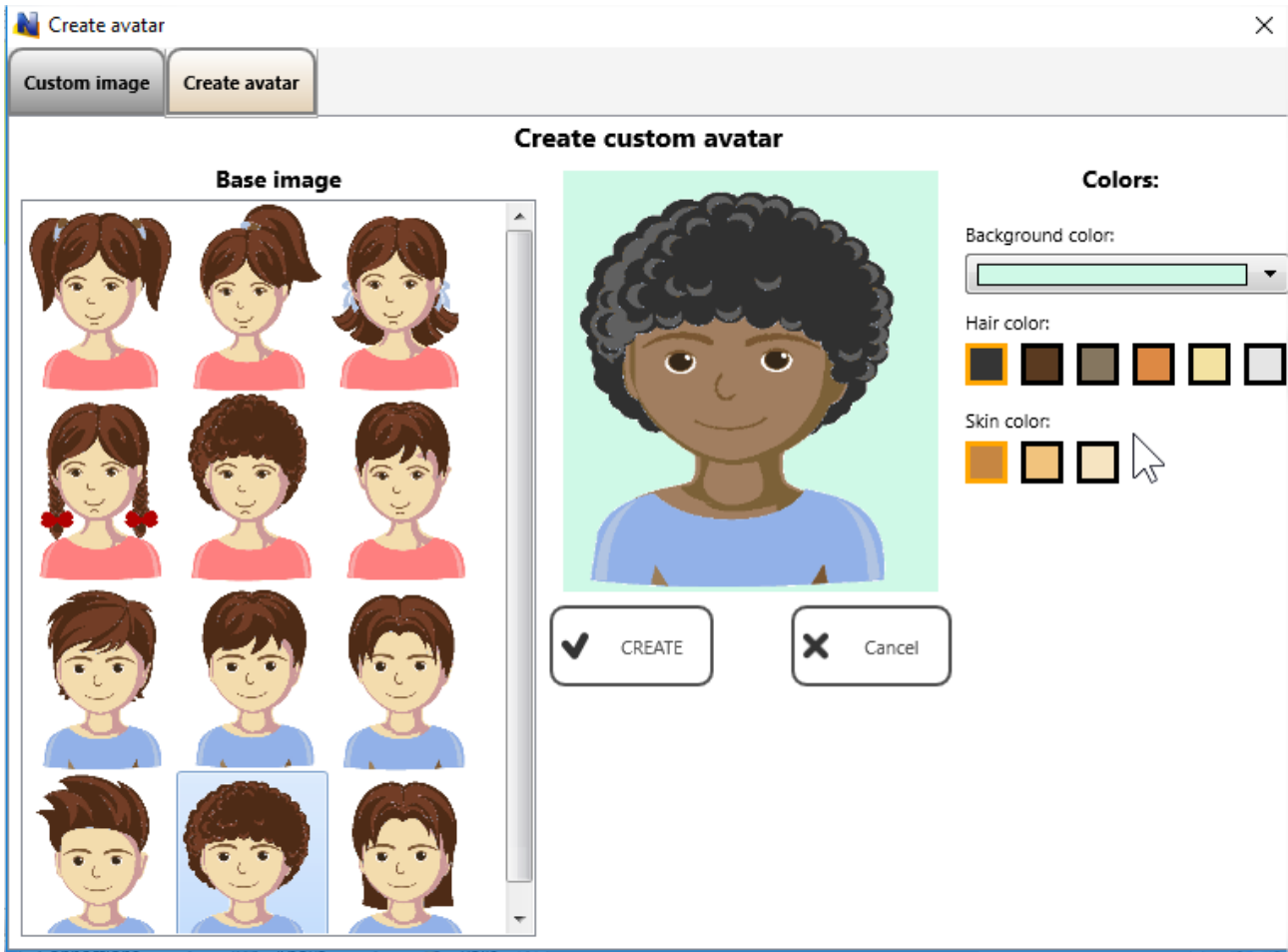
Customize the avatar or load a graphic image on **Custom Image** tab:

Click Crop and Use button to save changes.

Icons: connections will be represented in the connections list by small icons, making possible to place more connections on the screen than with other view modes:

Web-cam view: connections are represented by thumbnails from a web-camera attached to student computers. Except the source for the thumbnail image, this mode is similar to Thumbnails view mode, allows displaying icons, signs and other information in the same way as in Thumbnails View mode.

To change the view mode you can use the Thumbnail button's sub-menu:
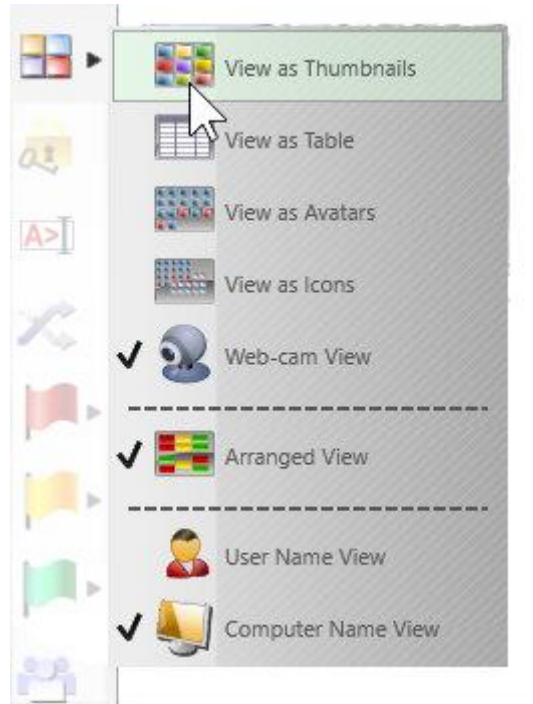
Or the main menu command **N – Options – View Options – View as**.

Left Toolbar

The left toolbar provides access to several connection-related features of the teacher console:

Refresh connections – reloads connections, current connections will be closed and re-opened. You can use this command if you experience some issues with network connection or a remote computer does not respond.

Scan – allows searching computers in the network, please see additional information regarding this feature below.

View mode – changes the view mode.

Lock – locks the teacher console, the teacher console will be locked and waiting for a teacher module password. If the password is not set, you will be prompted to create the password first.

Console – opens an internal Command Console window, where you can send commands to student computers directly, view notifications and connection events.

Random – selects a random connection. Works for connected computers only.

Select red, yellow or green group of computers. With these buttons, you can create a selection group for selected computers: select one or more computers click one of color group buttons, the selected computers will be assigned to the respective color group. Then, to select computers of the group again, just click the button again.

Student Group Manager – allows managing student groups. For additional information regarding this feature please refer to Tools and Features Guide.

Workspace operations

The workspace is a list of groups and connections with related information, including information about established connections, a position of thumbnails, color groups and other connection details. When some of connection details are changed in the process of the teacher module exploitation, on closing the program it will prompt to save changes to the workspace.

In several cases, you may need to transfer the workspace to another computer to create a copy of the group and connection structure. For such cases, you can use commands of **Workspace** menu (*N – Workspace*):
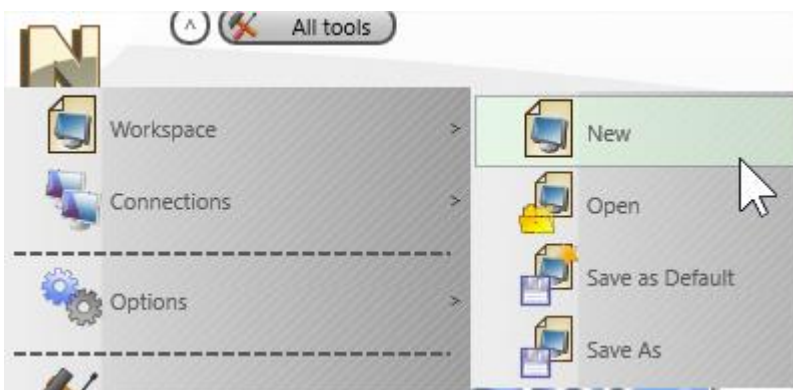
New – creates a new, empty workspace

Open – opens a workspace from a file

Save as Default – saves the current workspace with all its changes, and makes this configuration "default", which will be loaded at next startup.

Save as – saves the current workspace to a custom file.

To transfer the workspace to a new computer you need to save the workspace to some file with *Save as* command, then on the new computer open it with *Open* command and save it immediately as "default" workspace with *Save as Default* command.

D. How to search or add student computers remotely from the teacher console

In Net Control 2 Classroom teachers can search the network for available student computers and add them to the workspace, respective settings will be changed on student computers in the student module settings.

Requirements

To prevent unauthorized access to student computers, you must explicitly allow this feature in the student module settings and a special connection password must be set.

Installing the software on student computers with the standard installation package, on "Search options" page you need to enable **"Enable discovery. This computer may be found by teachers using Search"** option, in the field below, you need to enter a connection password:
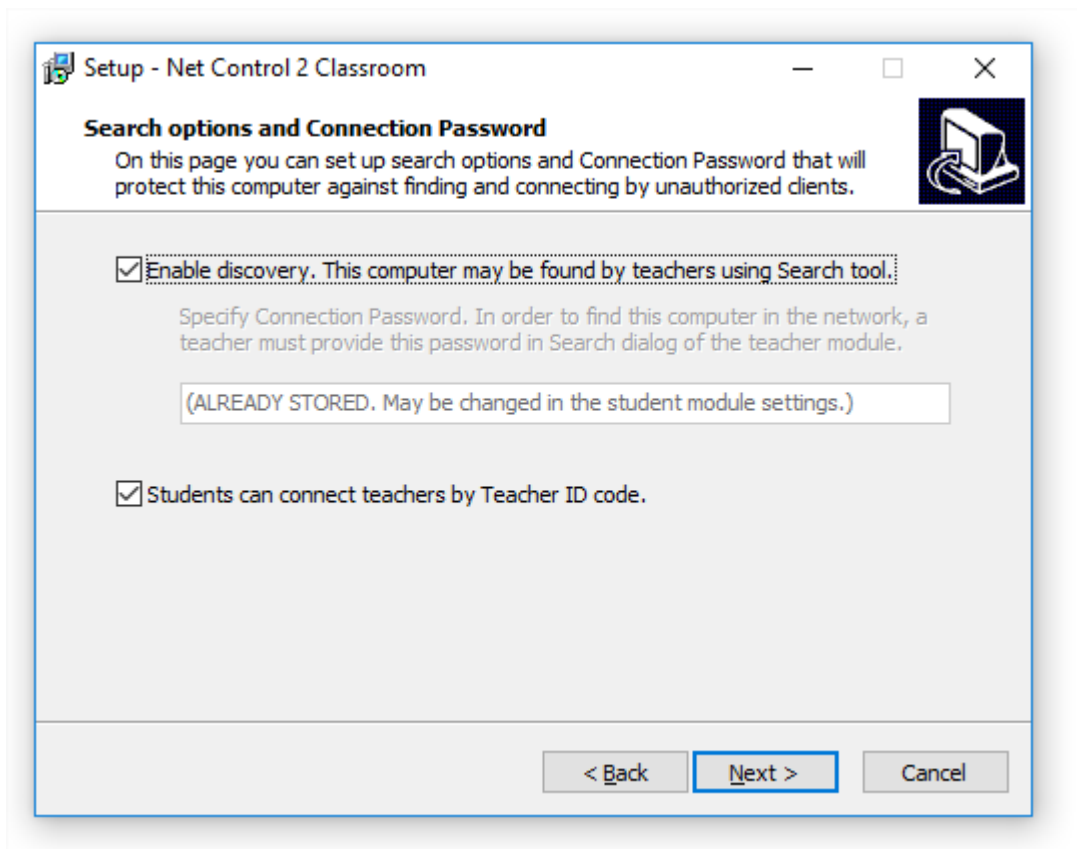
If the software is already installed, you can change these settings in the student module settings (on a student computer: right click Net Control 2 icon in the System Tray, then click Configure button; or, if you have access to student computers from another teacher computer, select student connections, use the main menu command N – Options – Client Options). In the appeared Net Control 2 Client Configuration window, on Connections tab:

Enable **"Allow instructors to find this computer in the network"** option, set up some **Connection Password** in the respective field:
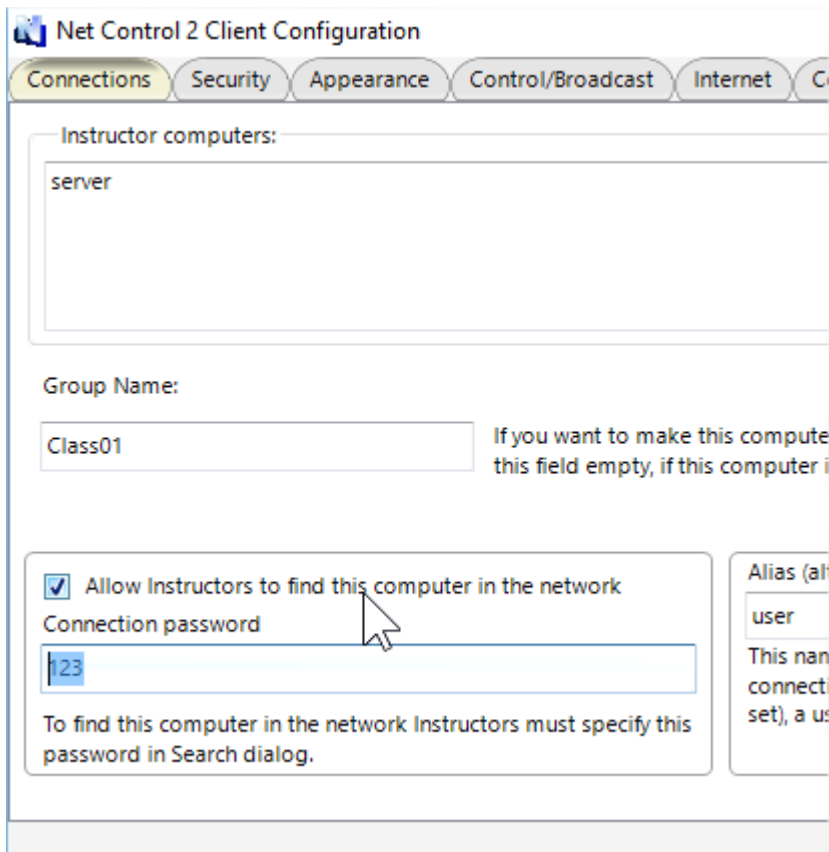
We recommend to set up the same connection password for computers of the same group (classroom).

Search

To search computers from the teacher console, click Scan button on the left toolbar:

In the appeared window:

Quick Search performs quick scan of the network for available student computers using Multicast protocols, the operation takes 10-15 seconds, but may fail if students and teachers are connected to different routers or are located in different sub-networks (VLANs).

Import or Add Computers – performs search within some provided list of computers, as an IP address range, text files containing computer names, Active Directory database or Network Neighborhood. The operation may take more time than the quick search, but allows finding computers in other subnetworks.

Search by Lesson ID – a special case of quick search that does not require Connection Password for connecting student computers, and is based on Student Registration feature.
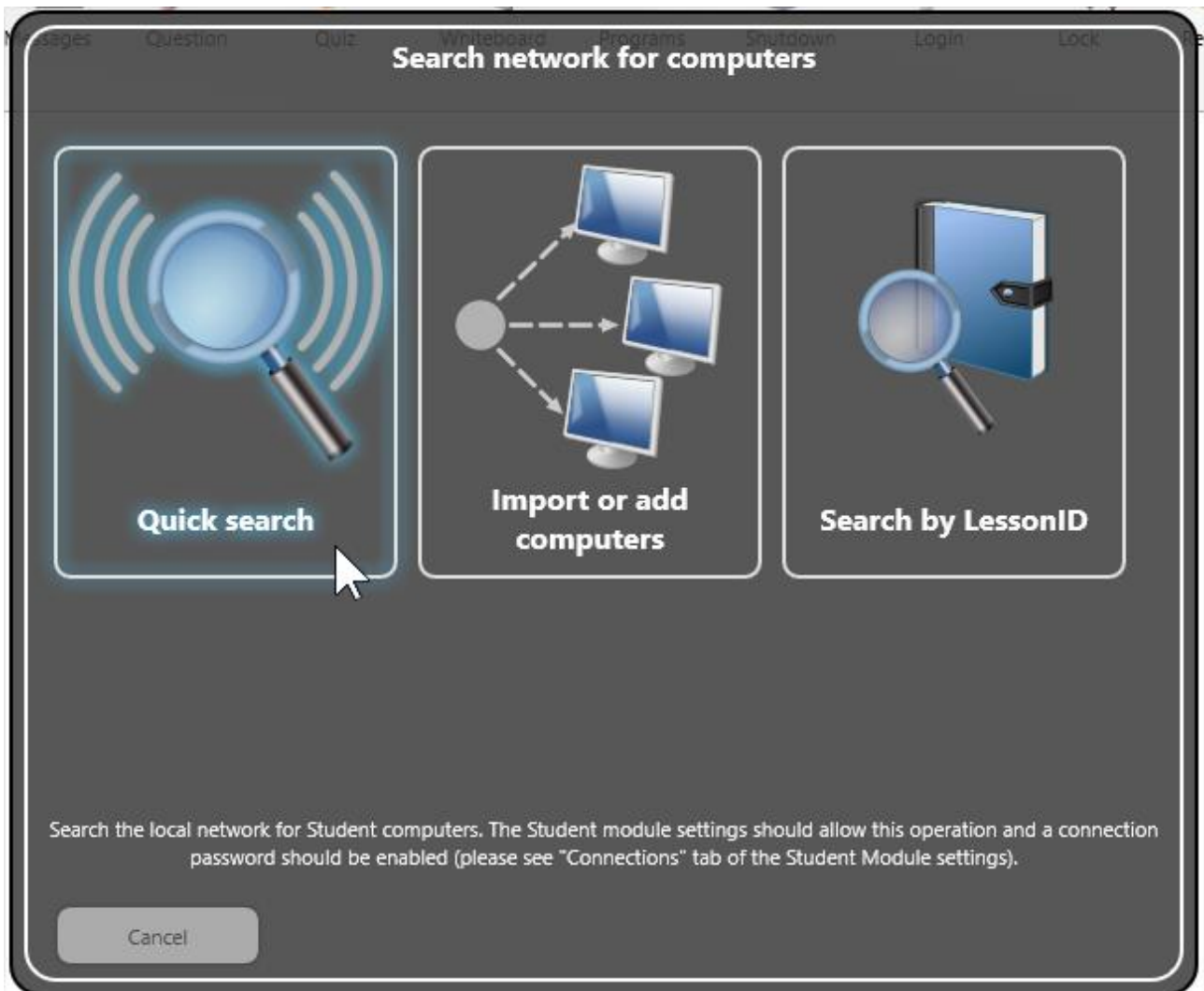
Quick Search

As a first step after clicking Quick Search button you will need to specify a connection password (please see Requirements section of this chapter):
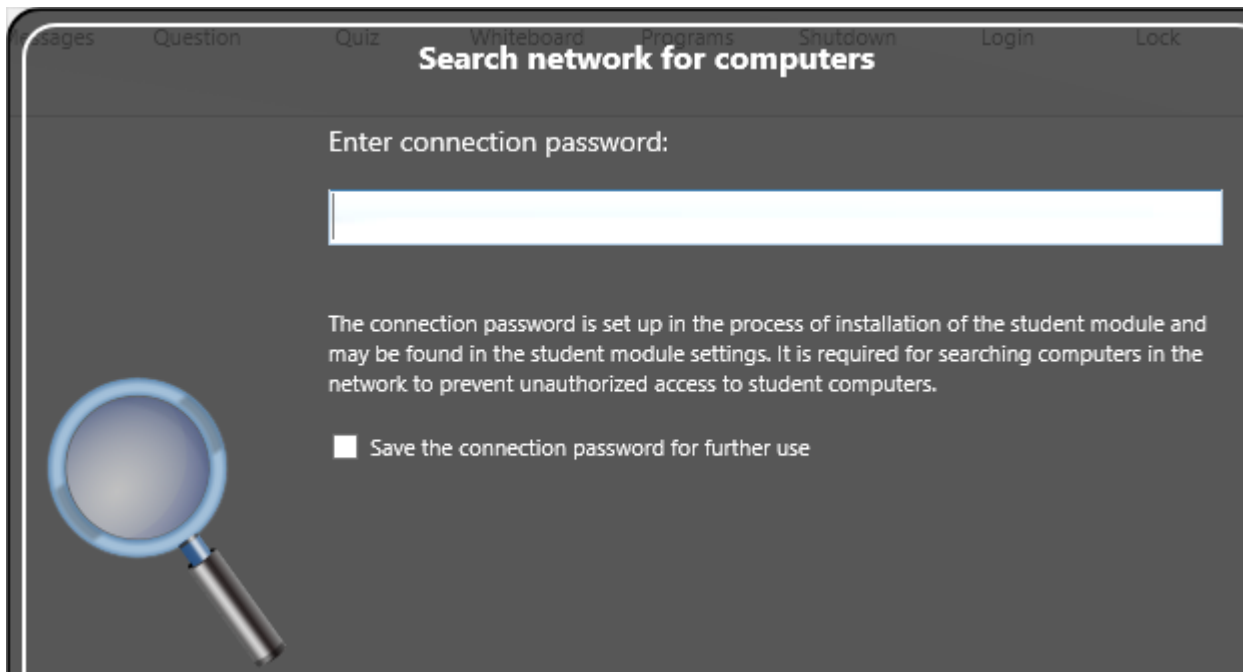
At next step, you should specify how the teacher module should treat found connections:
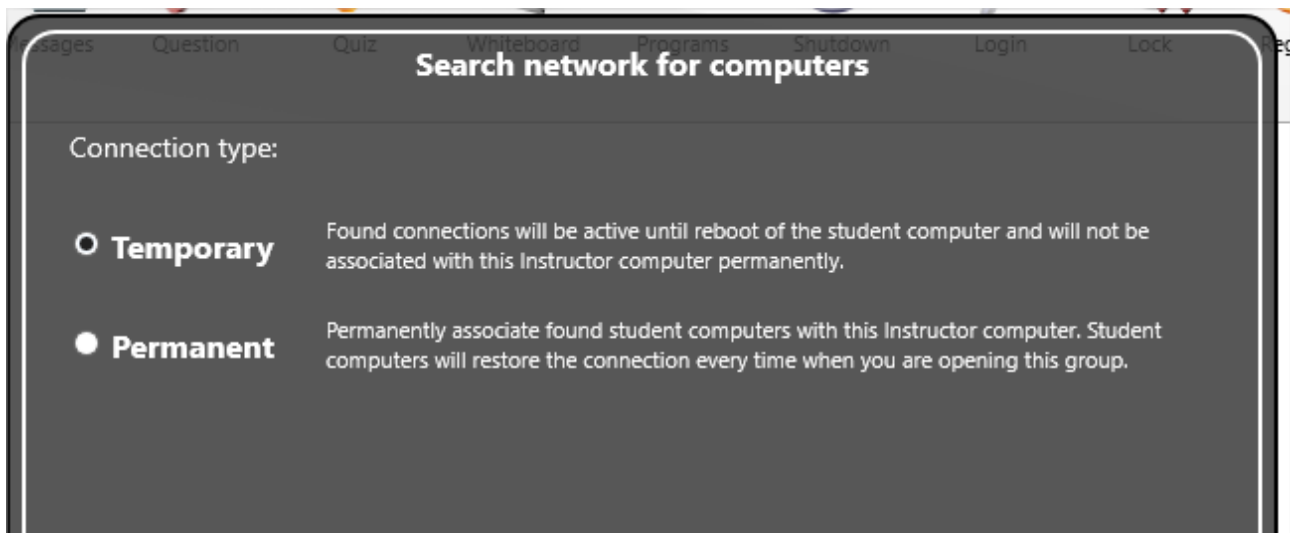
Temporary – establishes a temporary connection with found student computers. The connection will be lost and removed from the teacher console automatically, after a user on the student computer logs off or the computer or Net Control 2 Client Service is restarted.

Permanent – the found student computers will create a permanent connection with the teacher, the teacher module address will be stored in the student module settings.
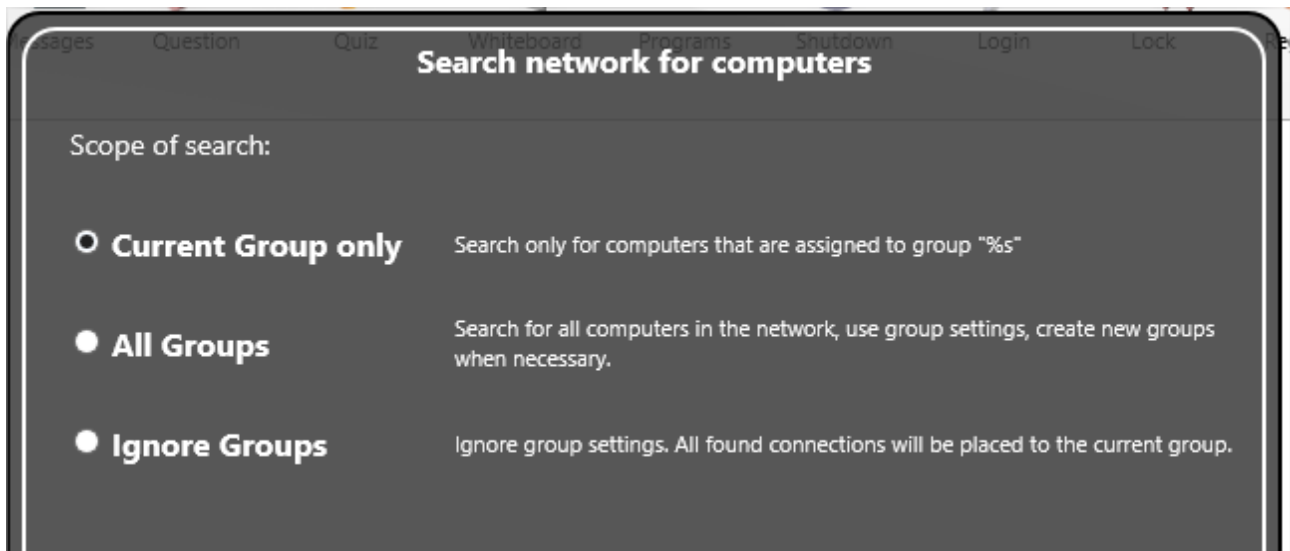
At next step, as the scope of search you can select:

Current Group only – the teacher module will search only for student computers that belong to the currently opened in the teacher module group. For example, if the currently opened group in the teacher console is "Default", and the student module has "Class01" as the Group Name in the student module settings, then the connection will not be added to the workspace.

All Groups – the teacher module will search for all students, which are available in the network and accept the specified connection password. If students belong to another than the currently opened in the teacher module group, the teacher module will create new groups automatically.

Ignore Groups – the teacher module will search for all available students, despite the group settings on student computers, all connections will be placed to the currently opened in the teacher module group. Group settings on the student computer will not be changed.

"Import or add computers" mode

First steps of this mode are the same as for *Quick Search* mode described in the previous section.

In addition, at fourth step you will need to create a list of network computers, where the teacher module will search for the available students.
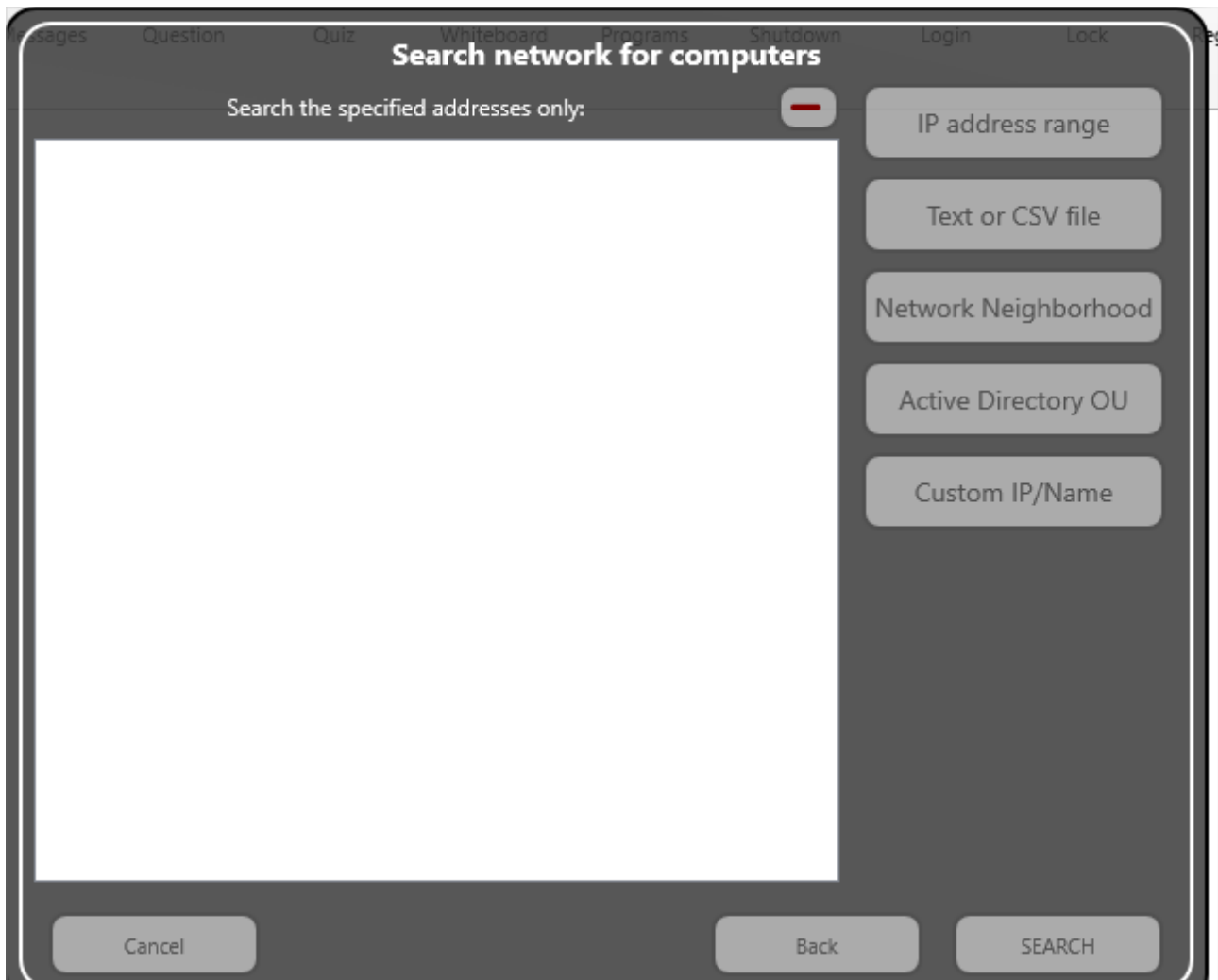
IP address range – you can specify a range of IP addresses, for example 192.168.0.1 – 192.168.1.254. The teacher module will scan each computer of the specified range for available student module that correspond to the specified group parameters and the connection password.

Text or CSV file – you can open a list of computers or IP addresses that are stored in a text or CSV file.

Network Neighborhood – you can select computers from Network Neighborhood where the teacher module will search the student module.

Active Directory OU – the list of available computers will be filled with computers that are present in Active Directory Organizational Unit database, and you will be able to select computers for search from this list.

Custom IP/Name – you can add one or more computers to the list of search, use a network computer name or IP address of the student computer that should be added.

The process of scanning the network for this mode may take several minutes, depending on the number of objects where the student module will be searching.

Search by Lesson ID mode

This mode is useful for 1-to-1 and BYOD environments, for situations when it is impossible to form permanent groups of students.

This feature is based on Student Registration tool, i.e. it is assumed that Student Registration is performed on student computers automatically after user logon.

In Student Registration window students can enter a Lesson ID parameter, as a word or a phrase.

Teachers then can use this Search by Lesson ID mode of Scan tool, enter Lesson ID phrase as the search parameter:
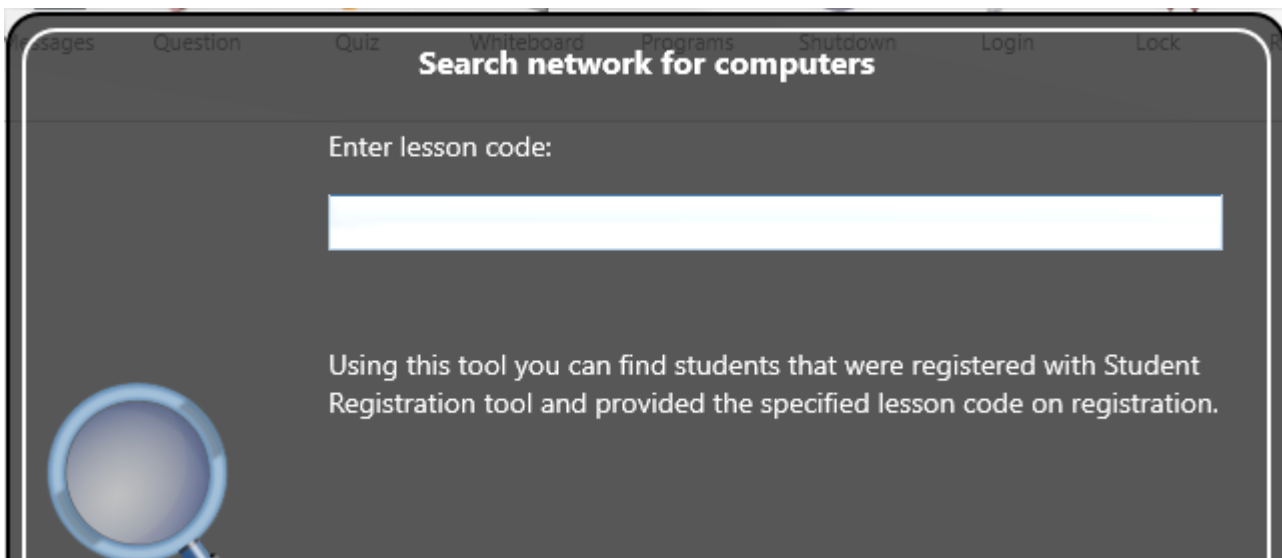
The teacher module will try to find students that have specified the provided Lesson ID on student registration.

The operation may fail if students and teachers are connected to different routers or located in different subnetworks (VLANs).

# E. How a student can connect a teacher.

With Net Control 2 Classroom version 12 it is possible to allow students to connect teachers, by initiative of the students, using commands of Student Console. This feature may be useful for 1-to-1 and BYOD environments, when it is impossible to create permanent groups, or to assign all available teachers to students.

Settings

This feature may be enabled or disabled in the student module settings. In the process of installation of the student module, the setup program may ask for search options:
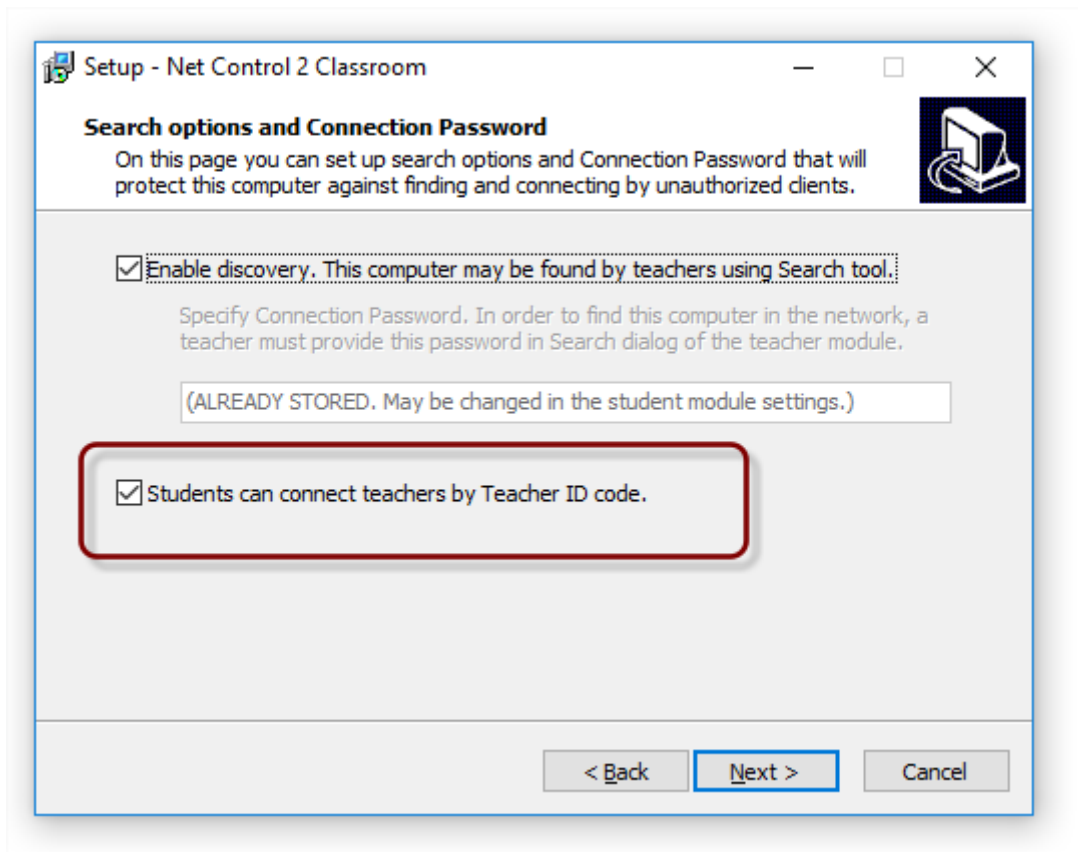
To enable student-initiated connections to teachers, enable **"Students can connect teachers by Teacher ID code"** option.

If the software is already installed, you can enable or disable the feature in the student module settings.

If you have access to the student computers remotely from the teacher console:

- o Select student computers in the teacher console;
- o Click the main menu command N – Options – Client Options.

Or on each student computer:

- o Click Net Control 2 icon in the System Tray.
- o Use Configure button in the appeared Student Console.

In the appeared Client Configuration window, on Appearance tab:
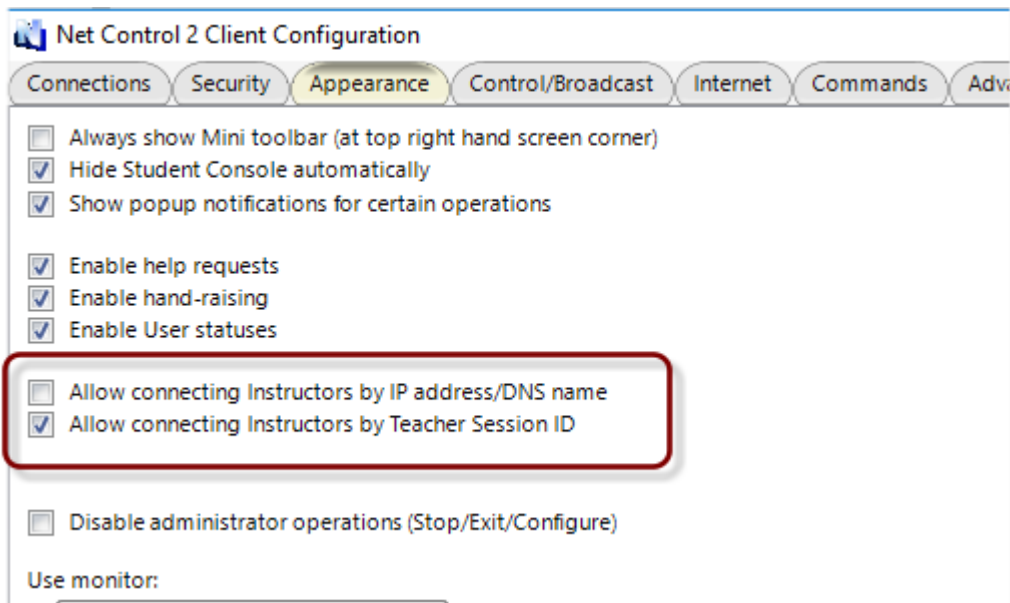
Allow connecting Instructors by IP address/DNS name – when enabled, students can connect teachers by entering an IP address or network computer name of the teacher computer (disabled by default).

Allow connecting Instructors by Teacher Session ID – when enabled, students can connect teachers by providing a special Teacher Session ID code. This feature is enabled by default.

Connect by Teacher ID

To connect a teacher by a Teacher ID code:

1. A teacher lets know to students a Teacher session ID code that is available in the teacher console, on About tab, in the upper-left hand corner of the About window:

2. Students on their computers open Student Console using an icon in the System Tray or Net Control 2 toolbar (if it is enabled); then click "Connect Instructor computer" button:
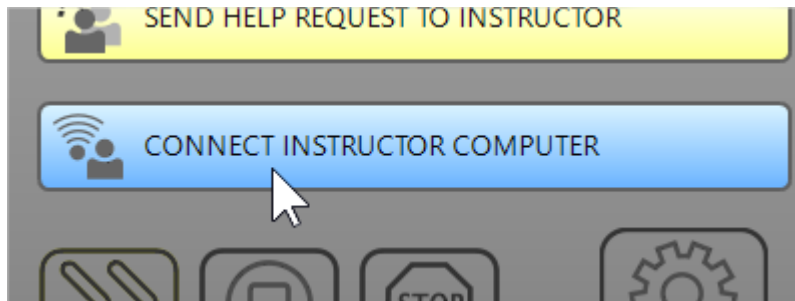
3. In the appeared window click "Find Instructor computer" button:
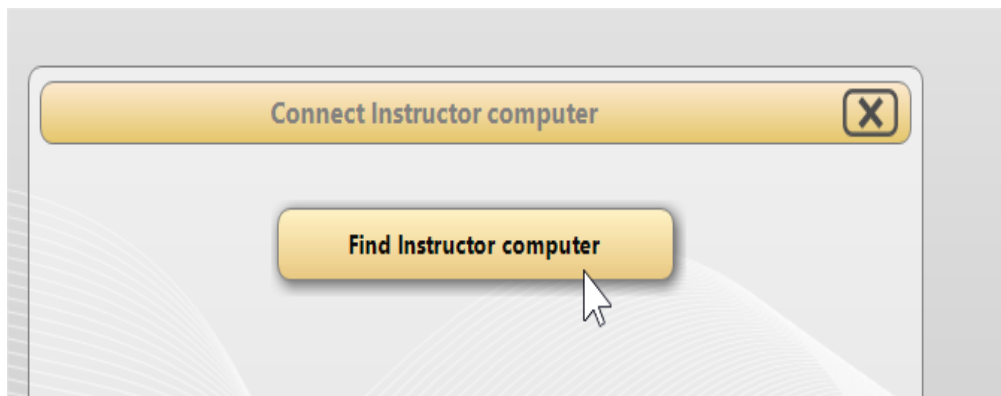
4. At next step, enter the Teacher session ID code and click OK:
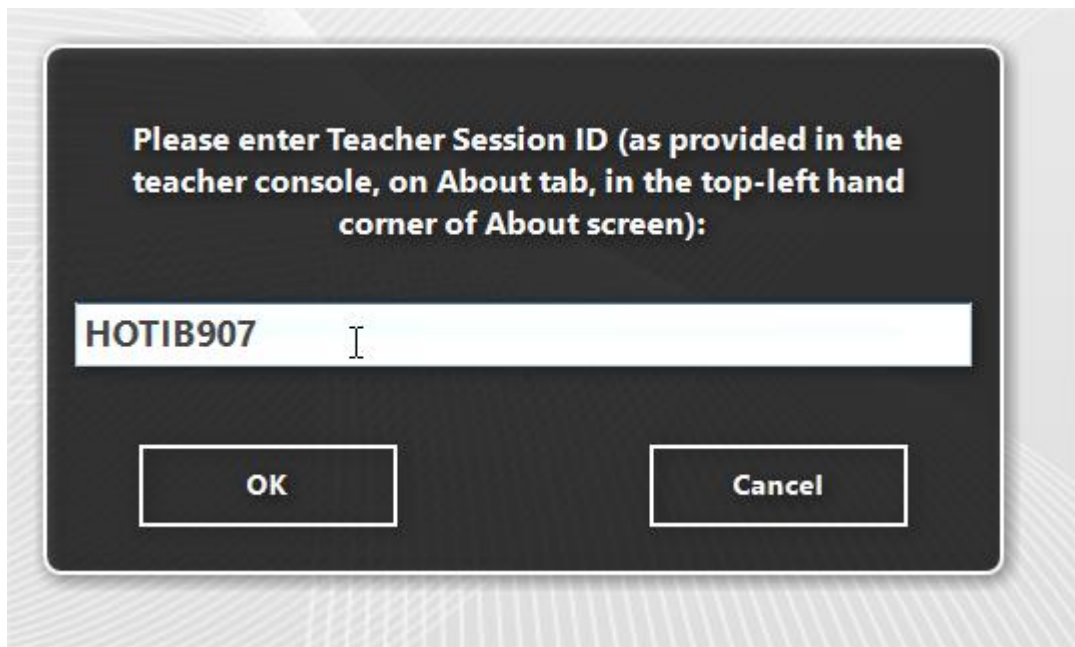
Connections, created with this feature are always temporary, i.e. "live" within the current session only, and are closed automatically after the user log off.

Connect by IP address or network computer name

In the same manner as described above, when "Allow connecting Instructors by IP address/DNS name" option is enabled, students can connect teachers by providing a teacher's IP address or a network name of the teacher computer.

To connect a teacher:

1. Students open Student Console using an icon in the System Tray or Net Control 2 toolbar (if it is enabled); then click "Connect Instructor computer" button:
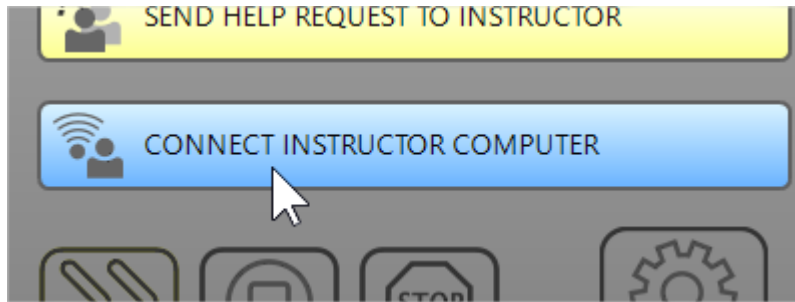
2. In the appeared panel:
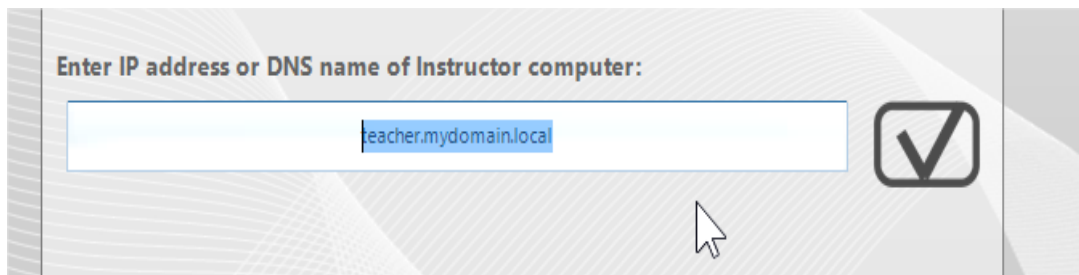
enter an IP address or DNS name of the teacher computer and confirm the operation.

Connections, created with this feature are always temporary, i.e. "live" within the current session only, and are closed automatically after the user log off.

F. STUDENT MODULE SETTINGS.

The Student Component may be configured remotely from Teacher Module or on a Student Computer directly.

To configure Student Module remotely from Teacher Console:

– select the Student Computers

– click menu command **N ->Options -> Client Options** or just click the **User Opts** button on the **Advanced Tools** tab

– configure the options as specified below

– click the **OK** button

To configure Student Module on a student computer directly:

- click on the Net Control 2 icon in the System Tray

- then click the **Configure** menu command

- Configure options

- click **OK**

Connections
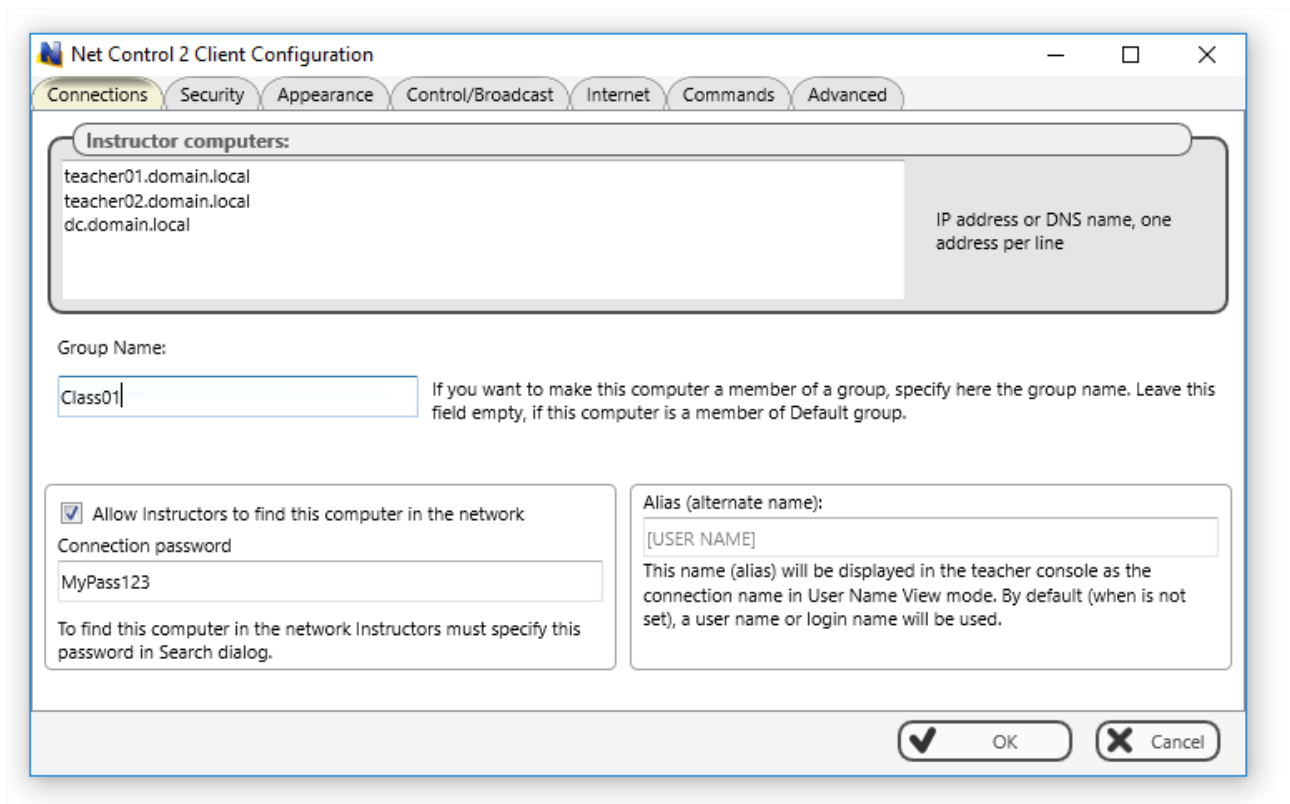
Instructor computers – a list of teacher computers, to which this student module will be connected. The teacher computers should be referenced by their IP address or DNS (network) name, one address per line.

Group Name – Group Name to which the computer belongs. For more information about groups, please see Chapter A.

Allow Instructors to find this computer in the network, Connection Password – enables finding this computer in the network by teachers not specified in the Instructor computers list, for more information please see Chapter E.

Alias (alternate Name) – this name will be displayed when Teacher switches the view mode from *Computer Name View* to *User Name View*. If it is left blank or [USER NAME] value is specified, the name of the currently logged in user will be displayed.

Security
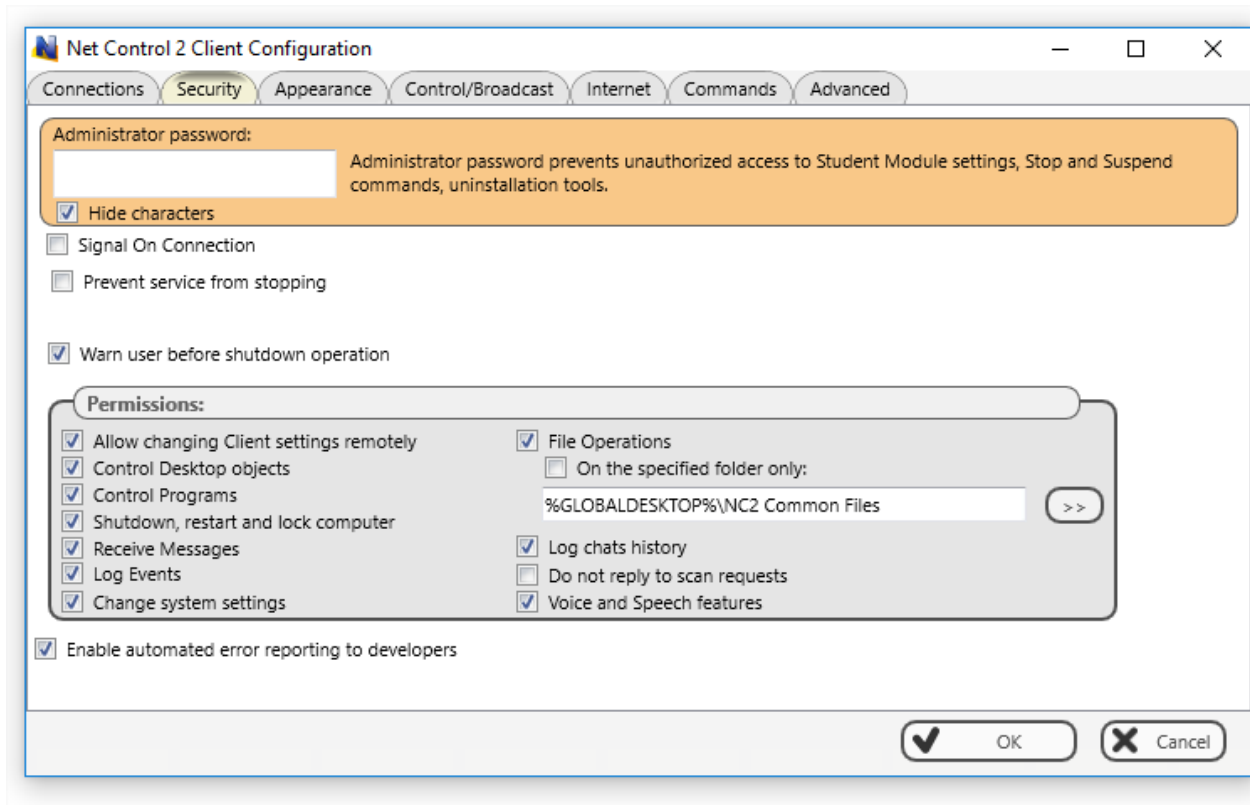
Administrator password used when a user attempts to change the settings of the student module or clicks the menu commands "Stop" or "Exit". We recommend setting up this parameter if you need to prevent stopping Net Control 2 Classroom service or unauthorized configuring the service.

Signal On Connection - when enabled, any connection of Teacher computer will be accompanied with a sound signal and text message.

Prevent service from stopping – when checked, the user will not be able to stop Net Control 2 Client service using Services console of Administrative Tools or net.exe system program.

Warn user before shutdown operation – enables 20-second timer before applying a shutdown, restart or logoff operation.

PERMISSIONS – allows limiting the functionality of service. When permission is disabled, all features related to this permission will be disabled:

- **Allow changing Server settings remotely** - when this permission is set, the Teacher can change Server settings remotely via the Net Control 2 Client.

- **Control Desktop objects** - permission for controlling the Desktop of the user computer remotely, receive screenshots, run Remote Desktop and Broadcast Desktop sessions, change resolution, etc.

- **File Operations** - permission for file operations between computers. When additionally, **"On the specified folder only"** option is set, all file operations may be performed within the specified folder only.

- **Control programs** - permission to execute and terminate programs and services remotely.

- **Shutdown, restart, lock** - permission to perform power-related operations, like shutdown, reboot, stand-by etc., and lock and unlock computer remotely.

- **Receive messages** - permission to receive messages from the Teacher computer.

- **Log Events** - permission for Events Watcher and Events Logger tools.

- **Change system settings** - access to Registry, Policies, and access to the Internet etc.

- **Allow Help Requests** - when enabled, student can send Help requests to Teachers via Net Control 2 Server menu.

- **Log Chats History** – chat history will be logged in
  C:\Users\YOURLOGINNAME\AppData\Roaming\Net Control 2\nc2chat.log file for Net Control 2 MiniChat and in *C:\Users\YOURLOGINNAME\AppData\Roaming\Net Control 2\nc2cchat.log* file for Chat tool.

- **Do not reply to scan requests** -when enabled, the service will not respond to scan requests sent from any Instructor computer.

Enable automatic error reporting to developers – enables anonymous reports to the software developer about critical errors occurred in the student module. The error reports contain only common information regarding the error and a place in the program, which has raised the error.

Appearance
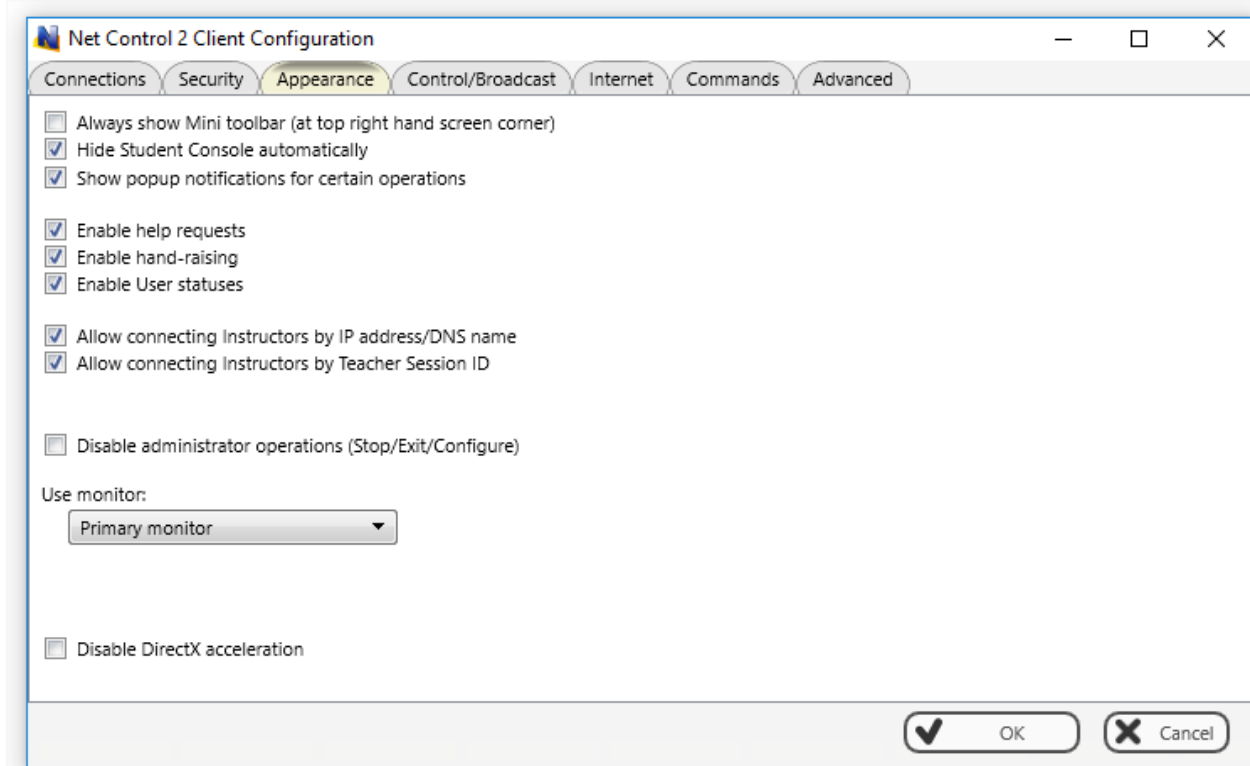
Always show Mini toolbar – when enabled, the student module will display the mini toolbar in the top area of the screen, the popup toolbar provides quick access to Student Console; Lesson Resources and Raise Hand features of Student Console.

Hide Student Console automatically – when enabled the Student Console will be automatically hidden if the student cursor is out of the window within more than 5 seconds.

Show popup notifications for certain operations – when enabled, the student module will display a popup notification to a user when the teacher uses Control (Remote Desktop)

command, runs a program or URL on the student computer, applies a new restriction profile, and for several other operations.

Enable Help Requests - when enabled, a student can send help requests to teachers.

Enable Hand Raising – when enabled, a student can "raise hand" in the Student Console. This raised hand status will be shown in the teacher console, the teacher can accept the request ("to call on" the student) or reset the status.

Enable User statuses – enables "user statuses". The user status is a short string that is visible on teacher computer in student connection properties, and it's shown in a tooltip when a student is changing his/her status. With this tool students can quickly communicate with teachers sending short messages to the teacher.

Allow connecting Instructors by IP address/DNS name – if enabled, students can connect Instructors by IP address or network computer name of the teacher computer, for more information please see Chapter D.

Allow connecting Instructors by Teacher Session ID - if enabled, students can connect Instructors by Teacher session ID, for more information please see Chapter D.

Disable administrator operations (Stop/Exit/Configure) – when enabled, the Student Console will not provide access to "Stop", "Exit" and "Configure" commands of Student Console.

Use monitor –in a multimonitor environment, here you can select a display, which will be used as a source for screenshots and thumbnails, displayed on the teacher computer.

Disable DirectX acceleration – enable this option, if you experience issues with compatibility of Net Control 2 software with DirectX drivers.

Control/Broadcast
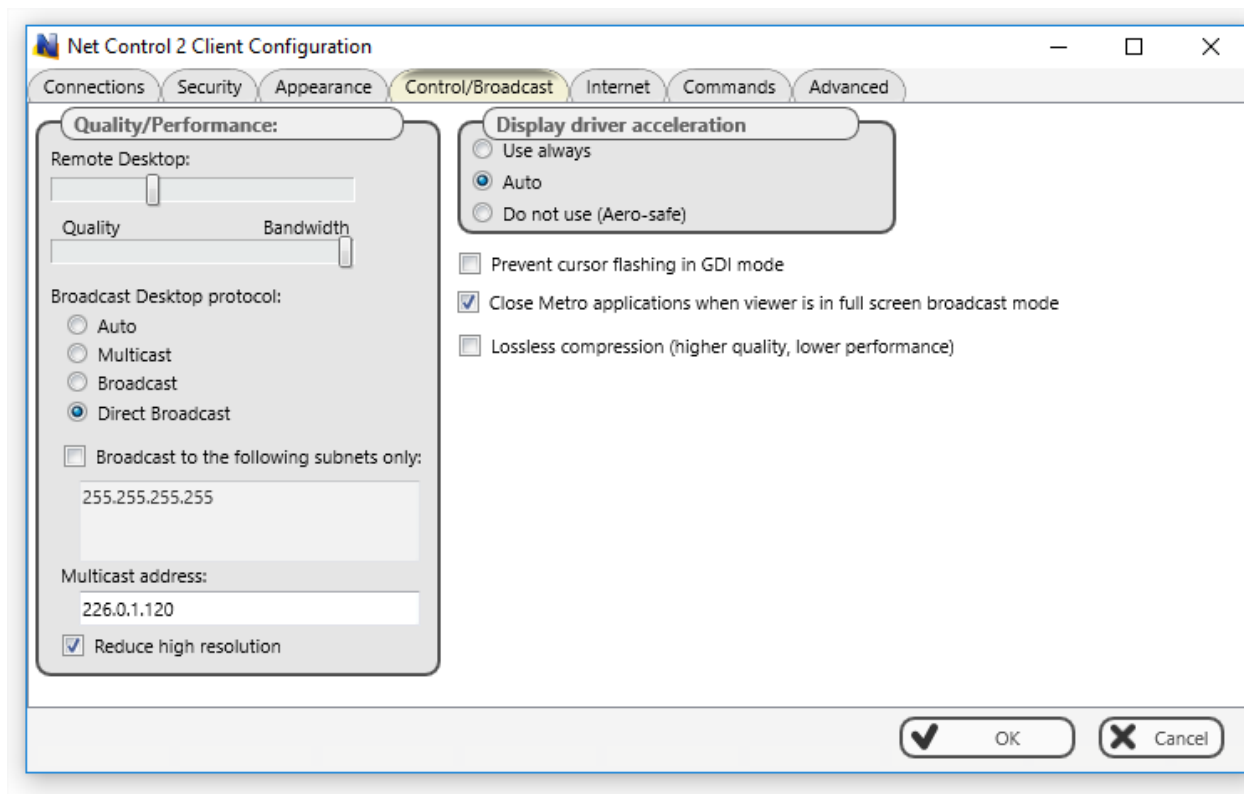
Quality/Performance.

Use this option to adjust the level of performance/quality for Remote Desktop and Broadcast Desktop features. Moving the track bar position to the left will increase quality of the picture displayed on remote computer, but at the same time will increase network bandwidth usage and may result slower speed of image refreshing.

Broadcast Desktop protocol:

Auto – the default value, Broadcast Desktop service will try to determine the transmission protocol automatically.

Broadcast – when enabled, the Broadcast Desktop service will use UDP Broadcast protocol for transmission data over network. This protocol has better compatibility with network configurations and hardware, and is recommended if clients use Windows XP operating system. If a network consists in several VLANs, a router or other network hardware may prevent information sent in Broadcast mode from sending to other VLANs, in this case you may need to add IP address of every VLAN to the broadcast list. For example if VLAN 1 uses IP addresses in range 192.168.0.1-192.168.0.254 and VLAN2 uses IP address range 192.168.1.1-192.168.1.254, you need to add the following addresses:

192.168.0.255
192.168.1.255
as IP masks for the specified networks.

Multicast – Broadcast Desktop service will use Multicast protocol as a transport protocol. Most often this protocol has better performance and resistance to errors during data transmission if clients use Windows Vista/7/8/10 operating system. If the default Multicast address interfere with other network software used in your network, you can change it in this dialog, and need to change it on all Student and Teacher computers.

Direct Broadcast – _enable this mode, if you experience issues with the performance of Broadcast Desktop tool_ with the default parameters, this mode has the better performance in slow or in high-loaded networks, but generates more network traffic that the previous modes.

Display Driver acceleration – enables or disables Video Hook Driver acceleration for Remote Desktop and Broadcast Desktop tools.

Video Hook Driver provides better performance and accuracy in screen changes tracking for these tools. In Windows Vista/7, when the VHD driver is active, Windows will disable Aero style for windows (semi-transparent borders and captions) as also some Direct3D features, which will be restored only after stopping the driver.

If you prefer to have Aero style active during Broadcast Desktop/Remote Desktop sessions in Windows 7, you need to <u>disable</u> the driver, setting up the "Do not use (Aero safe)" option.

For Windows 8/10, "Auto" or "Use always" modes are recommended.

Prevent cursor flashing in GDI mode – in several cases, some display/theme configurations may result flashing the mouse cursor on student computers when Remote Desktop session

("Control" command) is active, or on a teacher computer in Broadcast Desktop session. To avoid this issue you can enable this option.

Close Metro applications when viewer is in full screen broadcast mode – in Windows 8, full-screen Metro-applications may overlap Net Control 2 Broadcast Desktop Viewer window, making it invisible for students. When this option is enabled, the student module will automatically close all Metro applications before opening Broadcast Desktop Viewer window.

Lossless compression – when enabled, Broadcast Desktop and Remote Desktop tools will use lossless compression algorithms for image compression, this makes possible to display high quality picture of the remote computer on the receiving side, without compression "artifacts", but generates 1.5-2 times higher volume of network traffic.

Internet
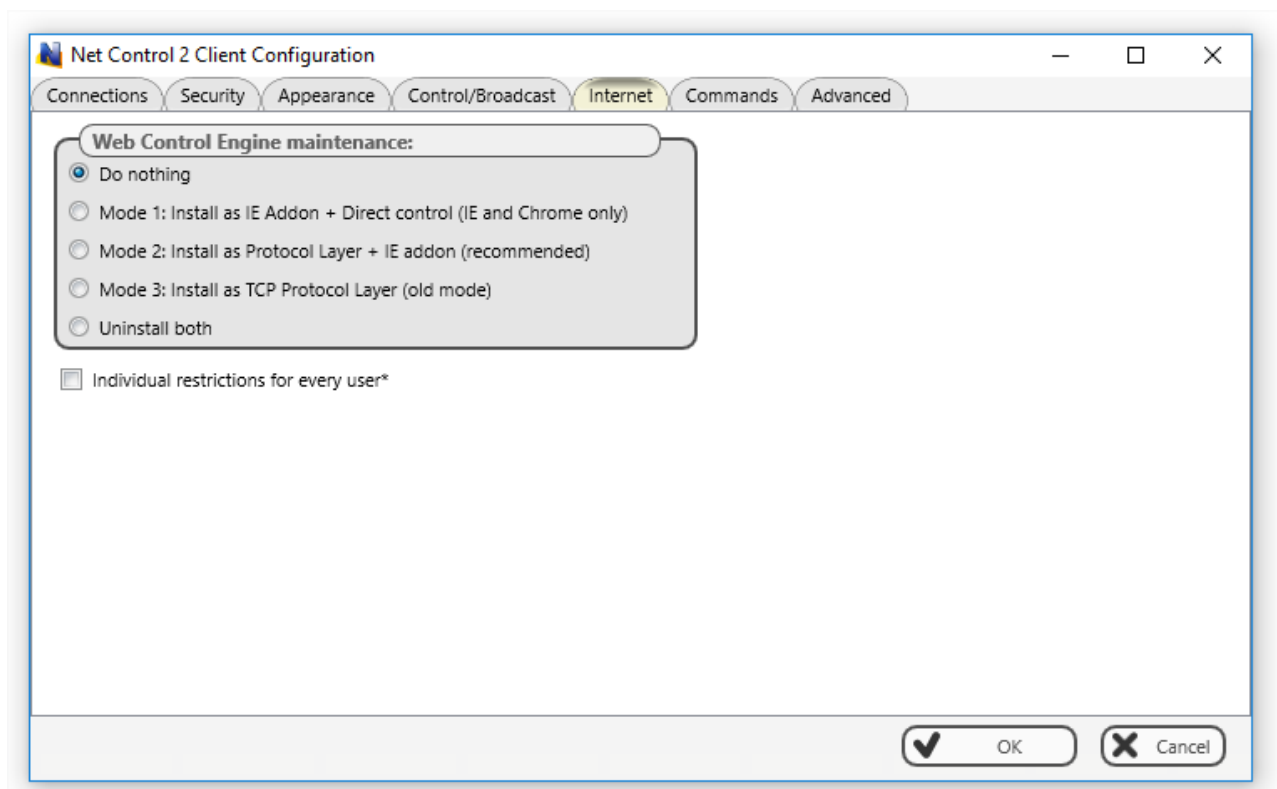
Web Control Engine maintenance – manage the installation of the Internet Control Engine. Setting any option, except for "Do nothing", will schedule the installation routine. **Do not change this value unless you need re-install the Internet Control Engine.**

Mode 1: Install as Internet Explorer Addon + Direct Control (IE only) – schedules installation of the Net Control 2 Internet Control Engine as a plug-in for Internet Explorer, and enables internal control of Internet Explorer and Google Chrome browsers from the service. This mode is most compatible with third-party software, but allows controlling access to Internet resources in Internet Explorer and Google Chrome only. Other browsers (Safari, Opera, Firefox, Edge) will be automatically blocked when an Internet restrictions are applied.

Mode 2: Install as Protocol Layer + IE addon (recommended) — schedules installation of Net Control 2 Internet Control Engine as a Protocol Layer. In this mode, applied Internet restrictions work in all the most popular browsers (including Internet Explorer, Edge, Chrome, Safari, Opera, Firefox), but the mode is less compatible with third party software. **Use this mode if you need to make Internet restrictions working in alternative browsers, like Chrome, Opera, Safari, Firefox**. If you have any compatibility related issues, or if all Internet restrictions do not work in your environment, change the mode to Mode 1.

Mode 3: Install as TCP Protocol Layer (old mode) – use this mode if you have issues with both Mode 1 and 2.

Uninstall both - Internet Control Engine will be uninstalled from the User computer. You can use this option if Net Control 2 software conflicts with other software installed on User computers. All Internet-controlling features will be disabled.

Individual restrictions for every user – by default all Internet restrictions are applied to all users of the same computer. This may result some issues when one computer works as a terminal server, several users are working on the same computer, sharing all its resources, and therefore share the same Internet restriction profile. Enable this option if profiles should be applied on a per-user basis, i.e. individually for every user. This option work only together with **Control web-sites from the service** option.

Commands
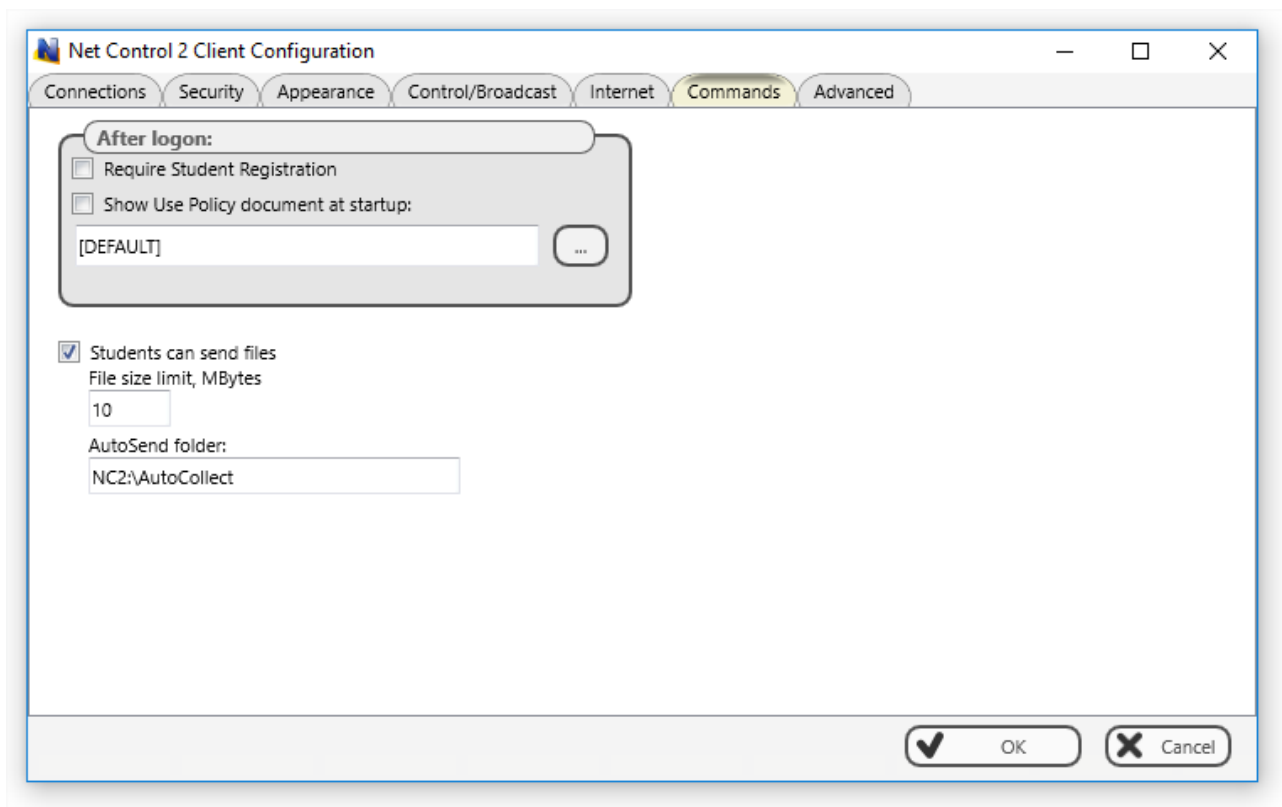
After logon operations are performed by the service automatically after a user logs on.

Require Student Registration – requires a student to enter his/her real name, other lesson details for Student Registration tool.

Show Use Policy document at startup – when enabled, the service will display the Acceptable Use Policy document at user logon, with this option you can also specify a path to a custom .RTF or text document that will be displayed instead of the default AUP document.

Student can send files – when enabled, Net Control 2 Student module will maintain a special "AutoSend" folder, so all files saved in this folder will be synchronized with connected teacher computers. Here you can also set up a path for the folder (by default it is in Net Control 2 Common Files\AutoSend folder on Desktop), and a limit for files that will be sent to teachers.

Advanced
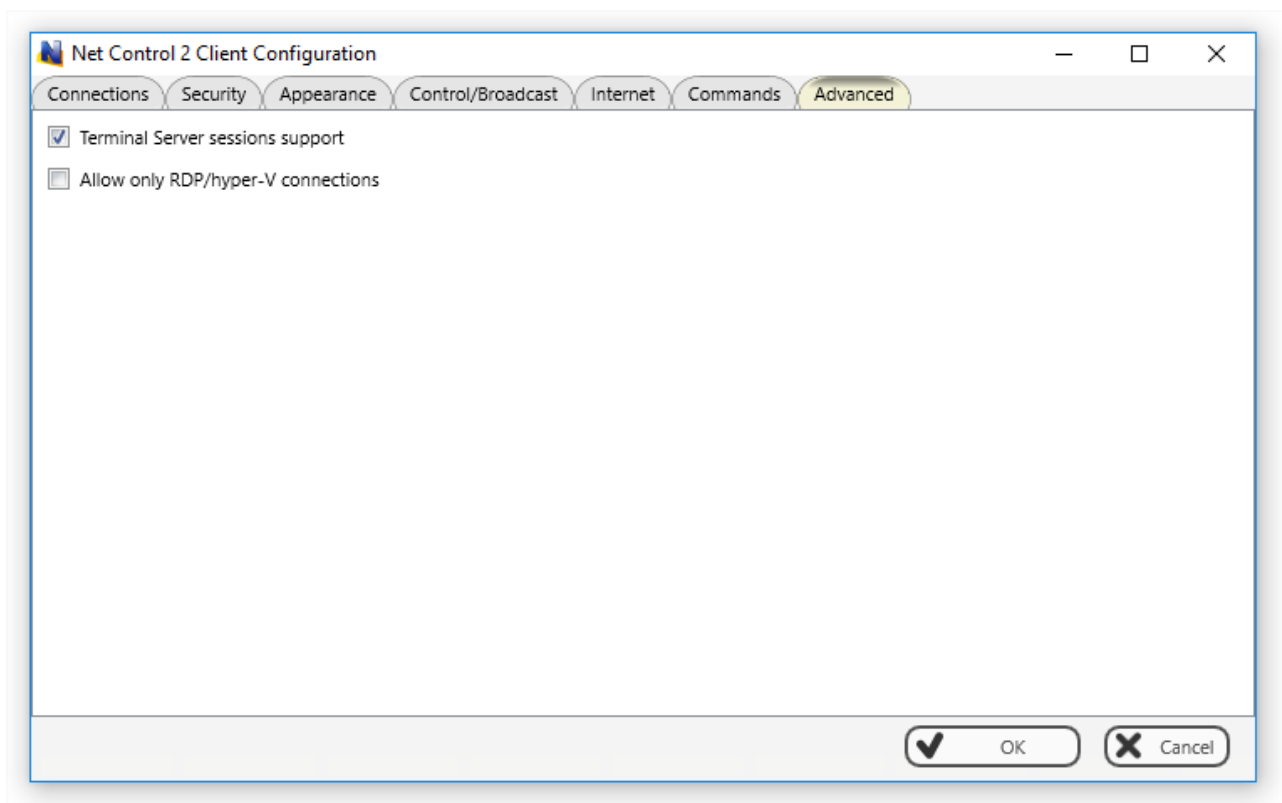
Terminal Server sessions support – if enabled, the student module will create a separate connection for users in terminal or RDP Windows sessions, this option is enabled by default.

Allow only RDP/hyper-V connections – recommended only for hyper-V environments, when two connections (logon screen and desktop screen) appear for each hyper-V virtual machine. This option disables the student module in console (real) sessions and enables it only for terminal sessions. Do not use it this option outside of the hyper-V environment.

Direct Connections

(only if Compatibility mode with previous version is enabled)
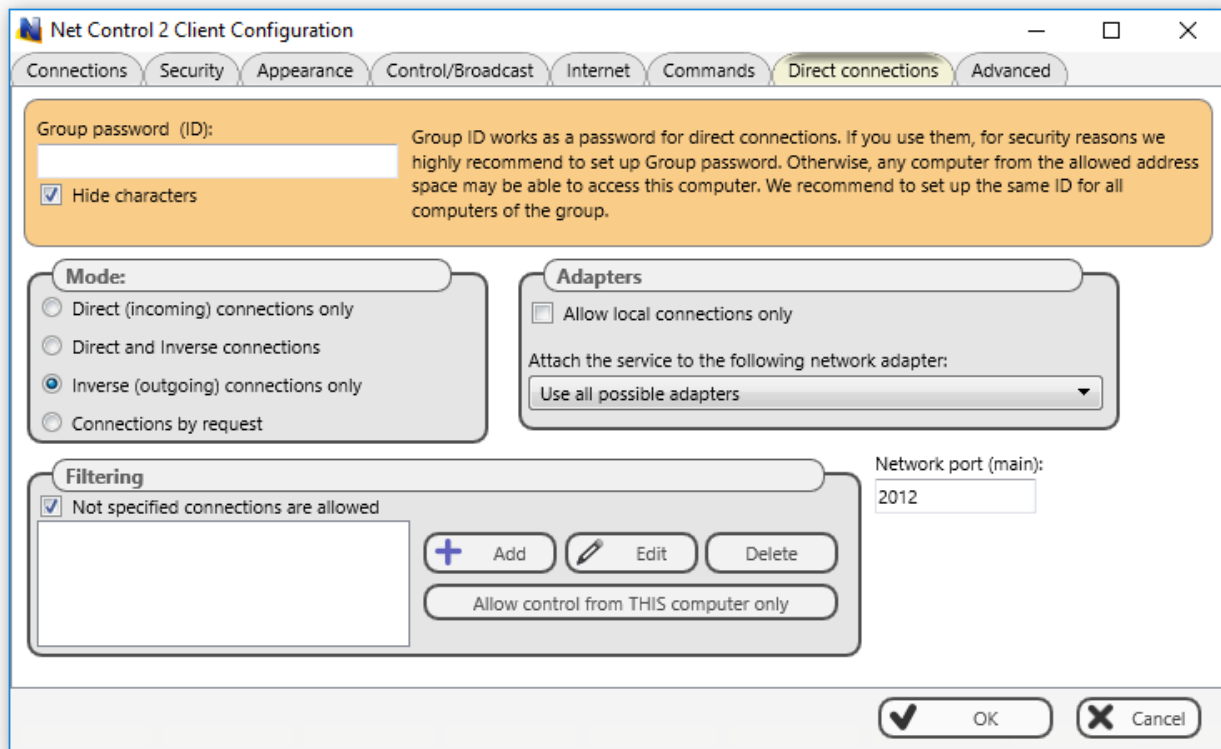
Group password (ID) – group password for the current group, we recommend to set up a group password if you are planning to use direct connections. Group password should be the same for all computers of one group (classroom).

Mode – enables or disables direct connections in combination with inverse connections used in version 12 by default.

Filtering – control access to this computer through Net Control 2 Teacher Module by IP address or name of connecting computer.

Not specified connections are allowed – when checked, all connections not specified in the list will be <u>allowed</u>. If is not checked, all connections not listed will be blocked.

Click **Add, Edit** or **Delete** buttons to add, modify or delete IP address or name to the list.
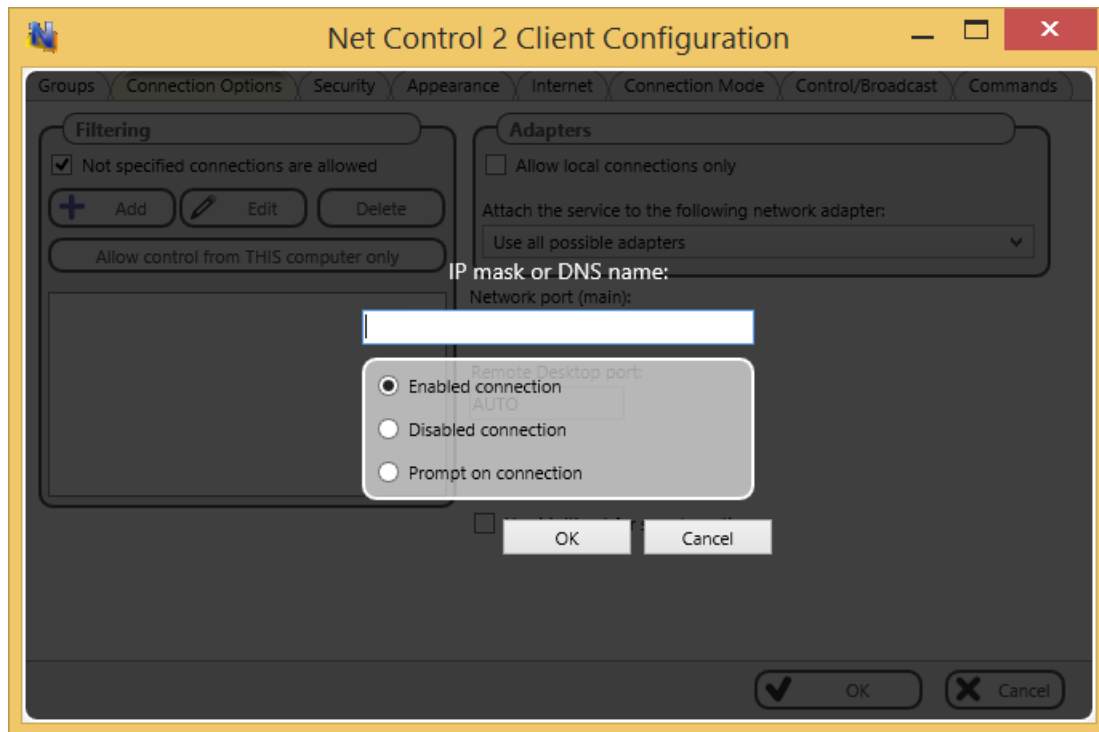
IP mask or Host name – specify one IP address, first digits of IPv4 address or DNS name of computer, e.g. 192.168.0.1, 192.168.1, COMPUTER01

Mark this connection as:

Enabled connection– the connection is enabled.

Disabled connection – the connection is blocked.

Ask User on Connecting – when this option is chosen, on each attempt of connection from the specified address, Net Control 2 Student Module will prompt *"Connect computer NNN?"*. Access is available only when the user confirms the connection.

"Allow control from This computer only" button adds IP addresses of Teacher computer to the list of allowed connections.

Allow local connections only – when checked, Net Control 2 will enable only those connections which were made from current network, i.e. first digits of IP address on both computers are the same.

Attach service to the following network adapter - here you can choose a network adapter where Net Control 2 service will be enabled. This option is useful when the computer has several network adapters.
Example: if your computer has access to a local network through a LAN Adapter and to the Internet through a WAN Adapter, you can select the first one to make Net Control 2 service available only within bounds of local network.

Ports:

Network port (TCP/IP, by default — 2012). Change this value ONLY if Net Control 2 software conflicts with other software in your network.

G. Teacher module settings

To change settings and options of Net Control 2 Teacher Console, click the main menu command **N -> Options -> Options**.

Several options of Control Options window are marked with **(*)** sign. To change these options you need to run the teacher module as administrator: in Windows 7-10 right click Net Control 2 Classroom shortcut on Desktop or in Start menu, then click menu command **Run as Administrator**.

Interface
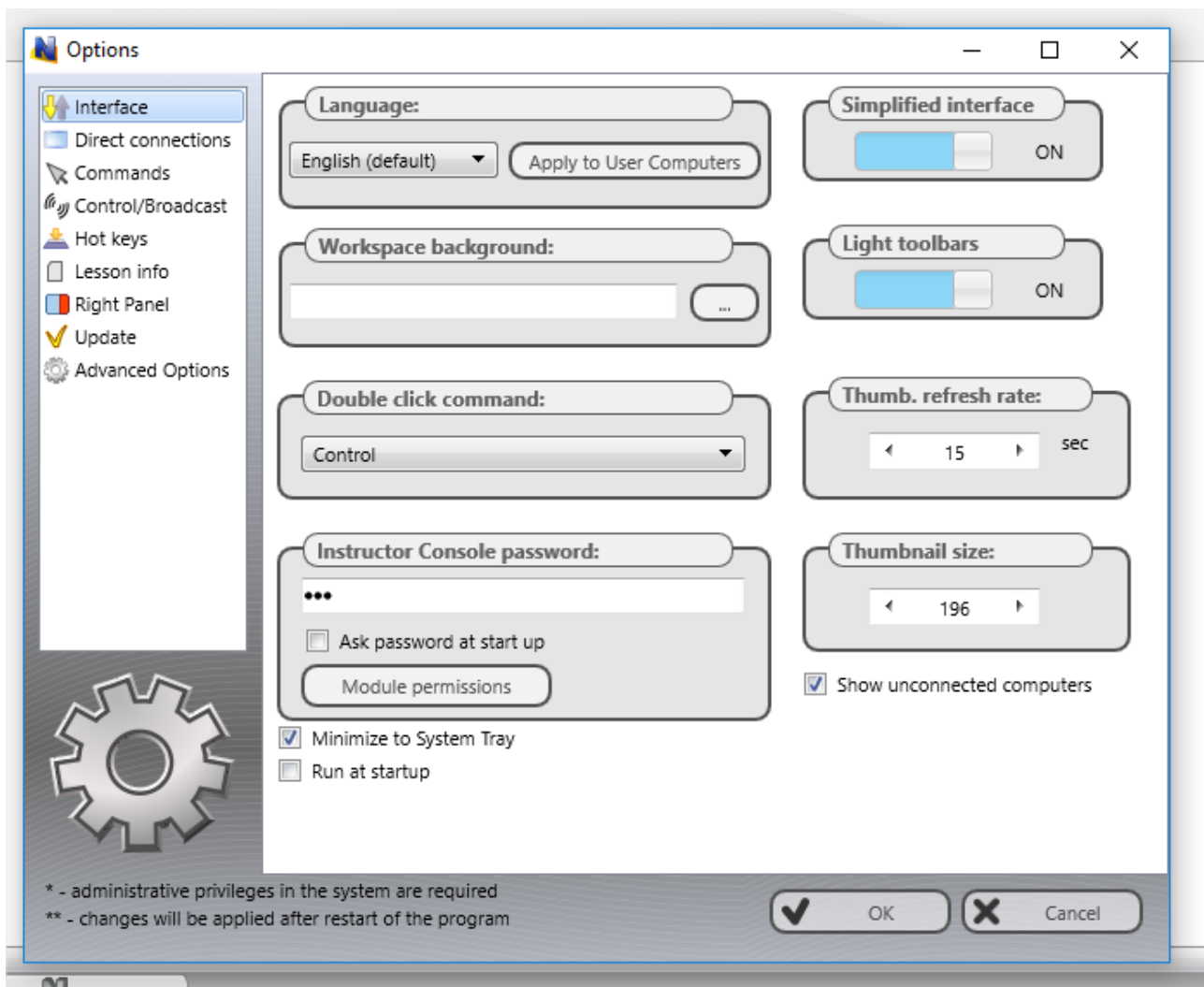
Language – select a language for the user interface. To apply language settings to client computers, select them in connections list, then select a language and click the **"Apply to User computers"** button.

Workspace background – use this option to set up background picture for the connections list.

Double-click command – allows to specify a command, which will be performed when a user double clicks a thumbnail in the connections list. Default double-click command opens Remote Desktop session with the selected computer.

Instructor Console password – here you can set up a password for the teacher console. If **Ask Password at startup** option is enabled, the password will be required at the teacher module startup. Otherwise the password is used by *Lock Console* command when you need to block the teacher module temporarily.

Module permissions – click this button to set up Windows security settings for the teacher module program file.

Simplified Interface – when enabled, the Basic View mode will be enabled, please see Chapter B for more information.

Light Toolbars – when enabled, turns on light toolbars for the user interface.

Thumbnail Refresh interval – specifies a refresh interval in seconds, when thumbnails of client connections will be updated.

Thumbnail size – specifies a width in pixels of a client connection thumbnail.

Minimize to System Tray – when the option is enabled, being minimized to the taskbar, Net Control 2 Administrator Console will remove its button from the taskbar and place an icon to the System Tray.

Run at startup – when the option is enabled, the program will be started automatically at Windows startup.

Commands
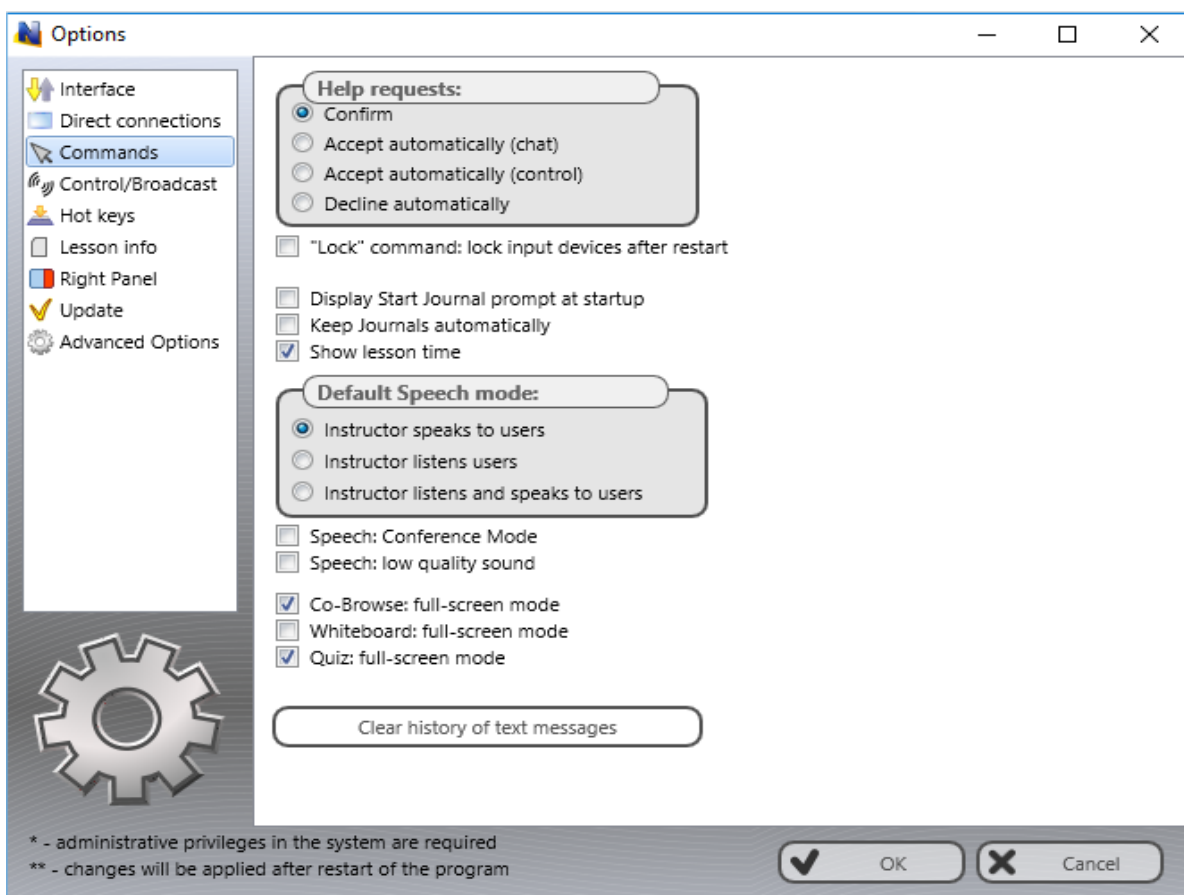
Help requests – determines a default action, which will be applied when a teacher receives a help request from a client computer:

> **Confirm** – the software will prompt the teacher what action should be applied;

> **Accept automatically (chat)** – accepts the request and initiates a chat session;

> **Accept automatically (control)** – accepts the request and initiates remote control session;

> **Decline automatically** – help requests will be automatically declined.

Lock command: lock input devices after restart – when enabled, and client computer was locked with the "Lock" command, Net Control 2 Client will restore the locked state of the client computer after restart.

Display Start journal prompt at startup – when enabled, the teacher console will display the "Start journal" prompt at program start up. For more information please refer to **the Journal** chapter of Tools and Features Guide.

Keep journals automatically – the teacher module will start a new journal automatically for each new session, when you are opening the teacher console, and will save it automatically when you are closing the program; the current journal will be stored in Documents\Net Control 2 folder.

Show lesson time – shows a lesson timer in the upper right hand corner of the teacher console.

Default speech mode – determines a default mode for Speech Manager tool, when you are opening it.

Speech: Conference mode, Speech: low quality sound – Speech Manager quality settings, for more information please see "Speech Manager tool" chapter in Tools and Features Guide.

Co-Browse: full screen mode, Whiteboard: full screen mode, Quiz: full screen mode – enables full screen mode on student computers for Co-Browse, Whiteboard and Quiz tools.

Control/Broadcast page

Provides access to settings of Control (Remote Desktop) and Broadcast Desktop tools, for more information please see "Speech Manager" tool chapter in Tools and Features Guide.

Hot Keys
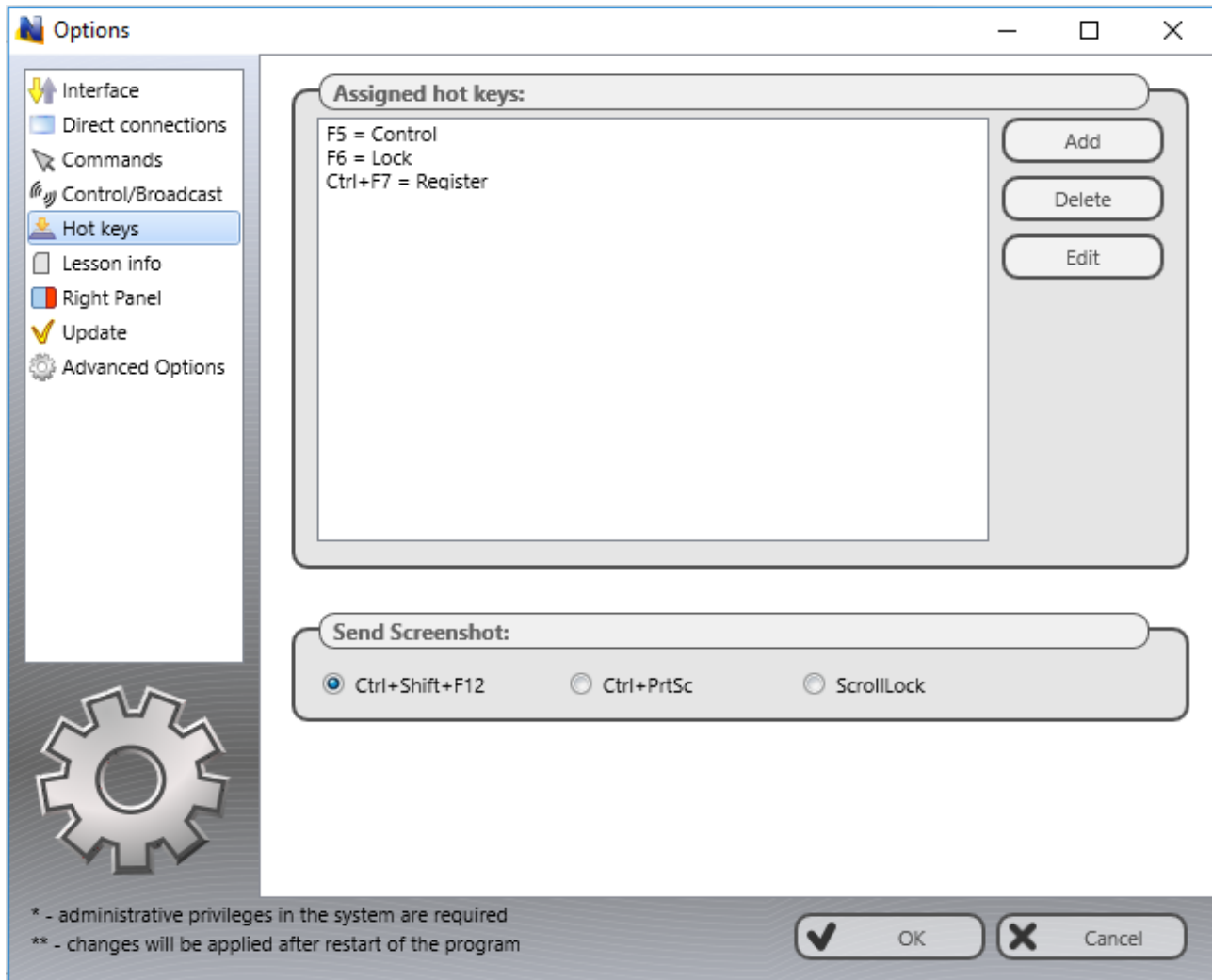
On this page you can assign a hot key to Net Control 2 Classroom tools or commands; to change a default hot key for the "Send snapshot" command.

The hot key for the "Send snapshot" command is a global key combination, i.e. it works in any Windows application when Net Control 2 software is running at background.

Lesson Information

The information on this page may be also updated with Start Journal, Lesson Resources, Student Registration tools. Teacher and lesson information is visible on student computers in Student Console window.

Right panel

The Right panel is a special toolbar that provides quick access to the most often used features and tools.
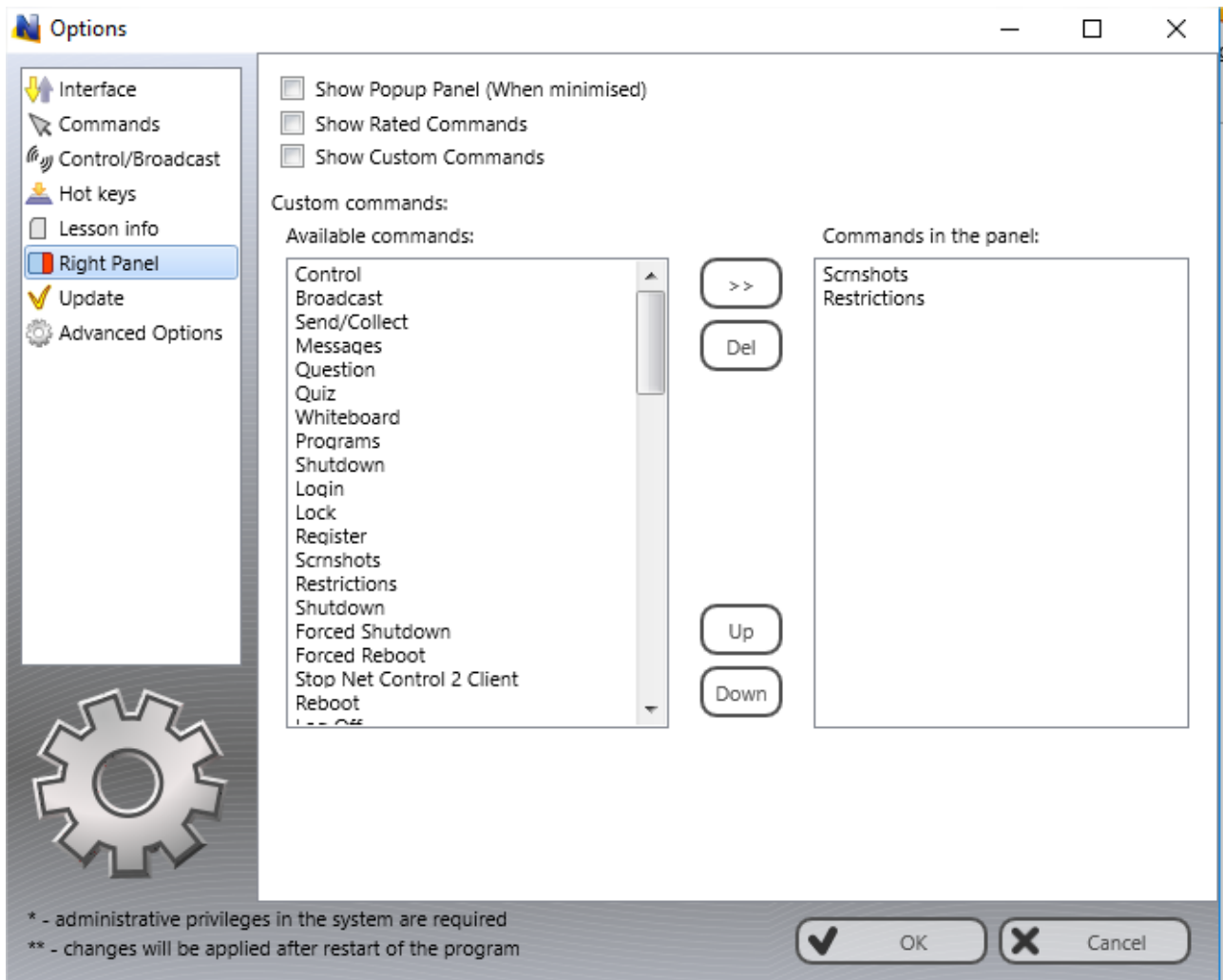
Show Popup panel – when enabled, the teacher module will display a popup panel on the screen when the main teacher module window is minimized, providing quick access to the most important tools.

Right Panel – enables or disables the Right panel.

Show Rated Commands – enables or disables the Rated Commands tab on the Right panel.

Show Custom Commands – enables or disables the Custom Commands tab on the Right panel.

Custom commands – the list of commands, displayed on the Custom Commands tab.

Update

Check for updates automatically – when enabled, the software will check the update server for new versions (updates) of the software and will notify when an update will be found.

Download updates automatically – when enabled, the software will download and update the software on teacher and client computers automatically. To change this option the program should have administrative privileges (please see a comment at begin of this chapter). Only critical updates are passed through automatic update, regular versions should be updated manually.

Do not update – when enabled, the software will not check the server for updates.
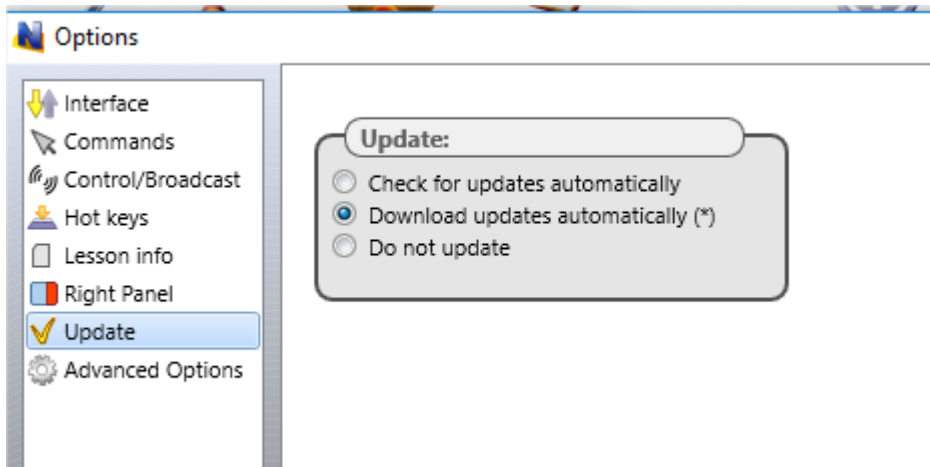
Advanced Options
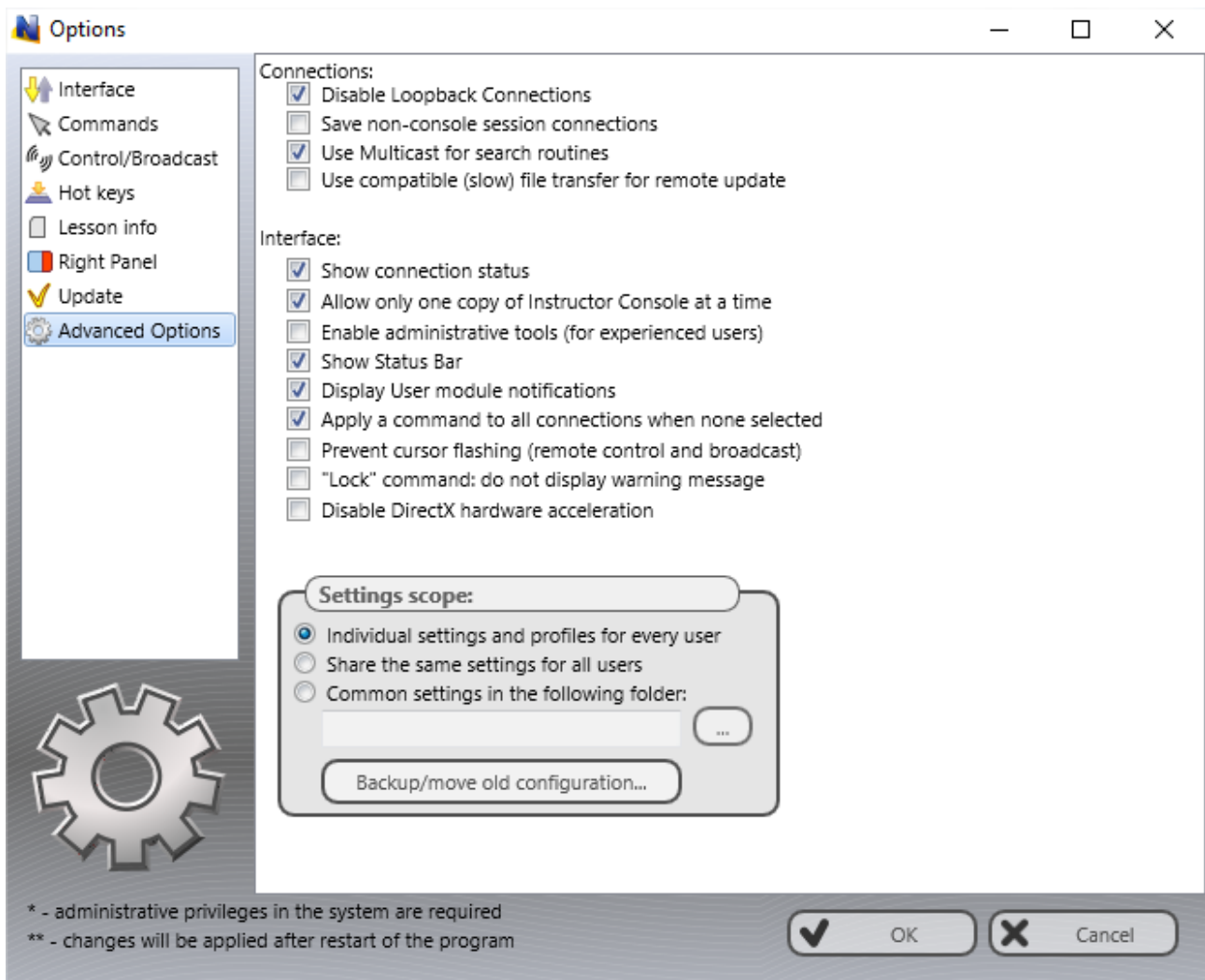
Disable loopback connections - Enabled by default. Connections to itself (to the same

computer, where the teacher module is installed) will be blocked. You need to enable this option if the teacher module is installed on a **_terminal server_**, and student sessions are running on the same terminal server.

Save non-console session connections – by default, the software stores connection information in the workspace (position, name, color groups) for connections that represent a real (console) session only, RDP sessions are always dynamic and are not stored. Enabling this option, you are making possible storing information for all sessions, real and terminal ones.

Use Multicast for Search routines – disable this option if your network does not support Multicast protocol.

Use compatible (slow) file transfer mode for update – enable this option if you need to update client software on student computers using menu command N -> Help and Support -> Update Net Control 2 Client and the client software on student computers has version below 8.xx

Show connection status – when enabled, displays status of a connection including error description in a popup message.

Allow only one copy of client at a time – when enabled, only one copy of the Net Control 2 Administrator Console may be started on the same computer.

Enable administrative tools – enables several tools that are intended for experienced users, and are hidden by default, including File Manager, system services control and several others.

Show Status Bar – enables or disables the Status bar at the bottom of main window.

Display User module notifications – when enabled, the Console will display notifications from client computers when some operation was failed or requires additional attention.

Apply a command to all connections when none selected – if enabled, when none connection selected in the connections list, the operation will be applied to all computers.

Prevent Cursor Flashing – prevents mouse cursor flashing in Remote Desktop (Control) and Broadcast Desktop tools that may appear with several configurations.

Lock command: do not display warning message – when enabled, and client computer was locked with the "Lock" command, Net Control 2 Client will not display a warning message or splash screen.

Disable DirectX acceleration – enable this option if the teacher module shows a critical error message after opening some tools.

Settings scope:

　　**Individual settings and profiles for every user –** every user on this computer will have its own set of profiles and settings;

　　Common settings for all users – when enabled, all users will share the same settings and profiles;

　　Common settings in the following folder – defines a custom local or network folder, where the teacher console will store its settings, workspace and profiles.

Direct connections

(only when Compatibility mode is enabled)
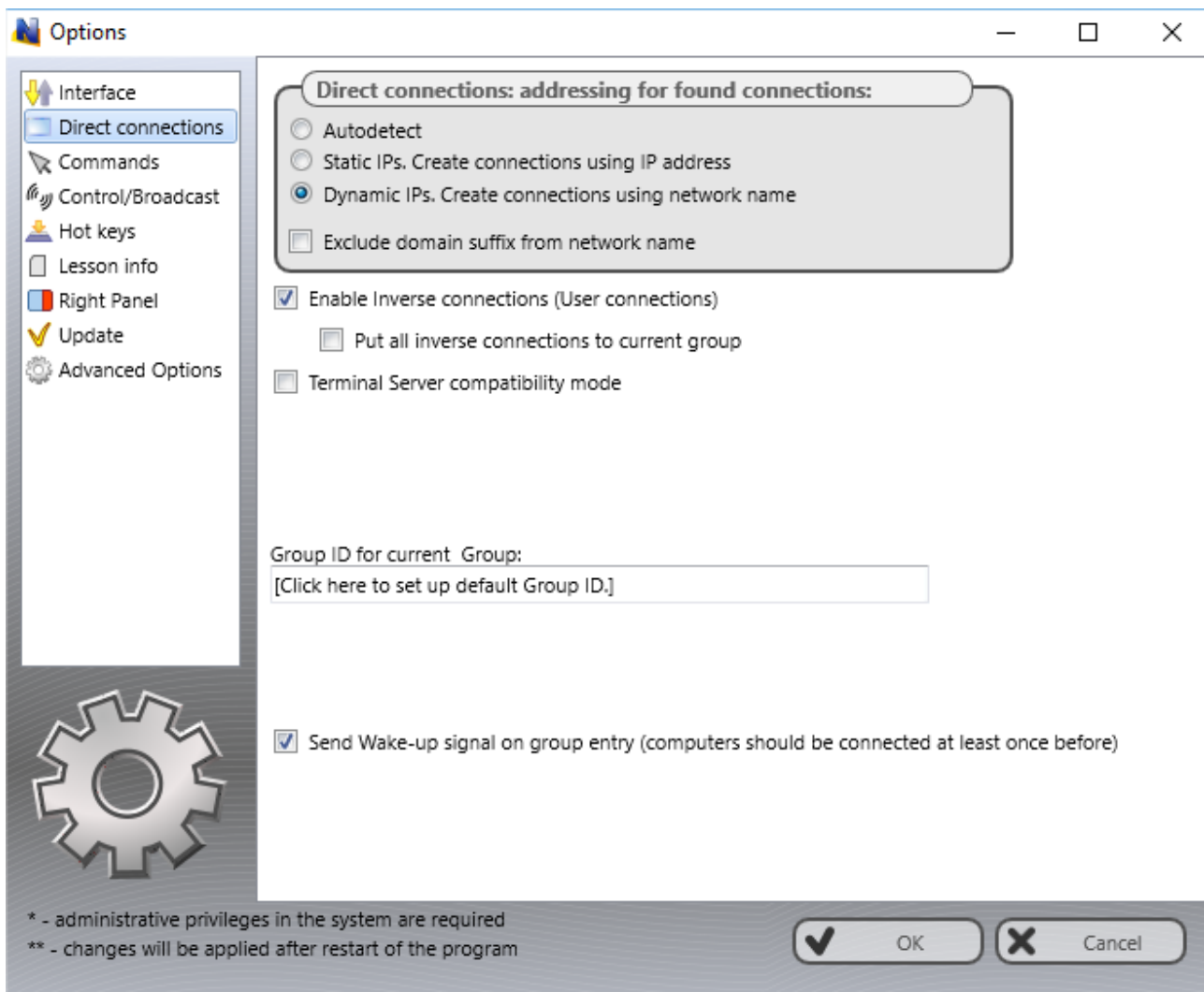
Direct connections: addressing for new connections – determines what addressing mode will use the teacher module when creating new connections for computers found in the process of scanning of the network:

Autodetect – the software will try to determine the better mode for the connection according to the network adapter configuration;

Static IPs – the software will use IP address of client computer to connect it from the teacher console. IP address of client computer should be static (constant), otherwise after restart of the client computer, the address may be changed and the Control will be unable to find this computer in a network and connect it.

Dynamic IPs – use this mode if your network uses dynamic IP addresses (DHCP) or if you don't know exactly what addressing model is used in your network.

Important! These settings will be in effect only for new connections. Particularly if some connections were created before these settings are changed, changing the options will not change addressing model of those connections. In this case, you need to delete all old connections, change settings and scan your network for new connections again.

Exclude domain suffix from network name – when creating new connections in a

network with domain, Net Control 2 will use full DNS name, including host name and DNS suffix, for example: ***mycomputer.mydomain.local***. Such full DNS name is recommended for addressing computers in a network with domain, but in cases when standard DNS server is not used (for example if Windows DNS server was replaced with a DNS server of a router) full network names cannot be recognized correctly. When this option is enabled, Net Control 2 will automatically remove DNS suffix and use plain computer name, for the example above is "***mycomputer***".
Try to enable this option if after scanning the network for connections it will find some new connections but will be unable to connect them.

> **Enable inverse connections – (**enabled by default). Enable this option if student module-initiated (inverse) connections should be allowed. This is also required for terminal client connections.

> **Put all inverse connections to current group** – enable this command if inverse connections should be placed in the current group, despite group settings of the student module.

> **Terminal Server compatibility mode** – enable this option if any of clients was installed in Terminal Server compatibility mode.

H. Installation of student components using Active Directory Group Policy Objects (GPO) and MSI packages.

Requirements

Windows Server 2003, 2008, 2012 or 2016 with Active Directory services installed, enabled; administrative privileges.

MSI Packages

Special MSI package for the student module installation through Active Directory GPO and software installation services, is available free-of-charge for registered customers by request. This package is intended for the installation of the student module only, in default configuration and without any additional modification or configuration. Custom settings may be passed to the client module separately, using administrative templates for GPO, please see Chapter I of this manual.

Alternatively, a special MSI Builder utility is available for registered customers. This utility is intended for compiling custom MSI packages with some pre-defined settings. MSI Builder generates unsigned MSI packages.

To request the package or MSI Builder program please contact us at http://ask.netcontrol2.com ,

To install either the standard or custom MSI package:

1. Copy the MSI package to a shared folder on your network.

2. Log in to the Domain Controller with administrative privileges.
3. Open **Active Directory Users and Computers** applet.
   (For Windows Server 2012, click **Start -> Administrative Tools -> Group Policy Management.**

4. On the left pane, browse and select a domain where you wish to deploy the package. Right click and select **Create a GPO in this domain:**
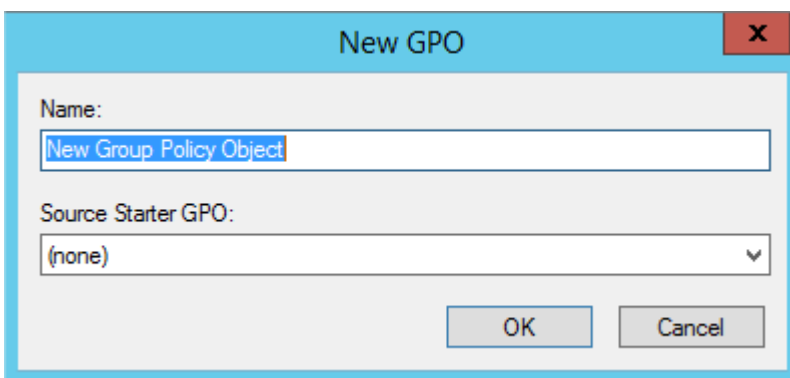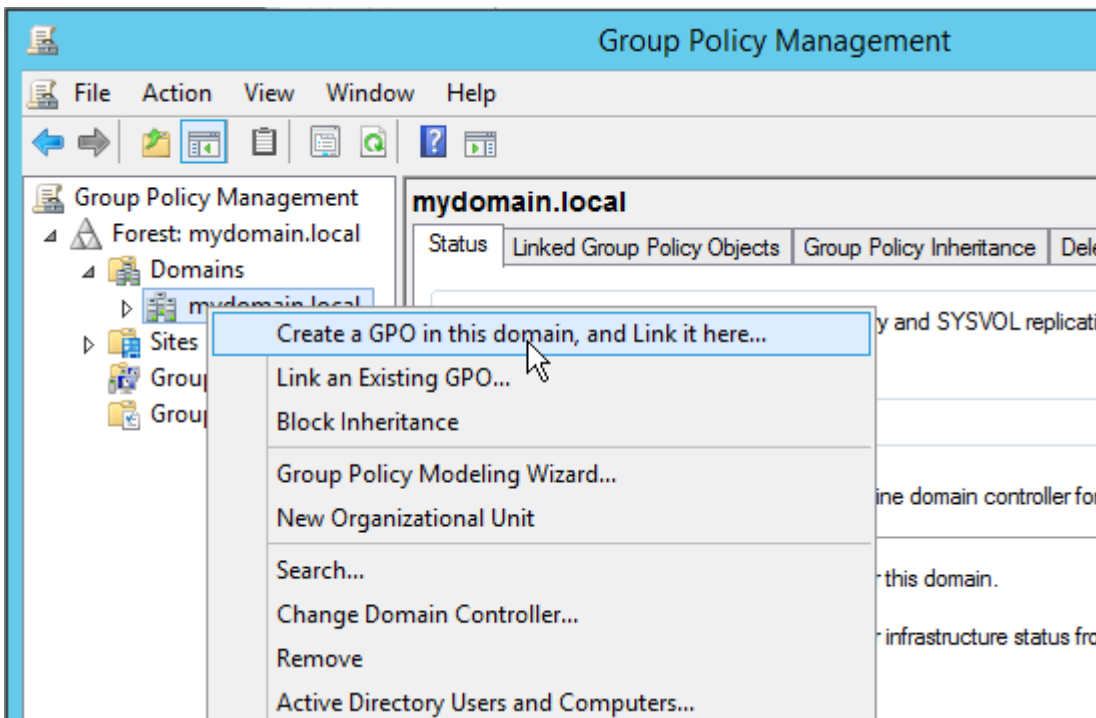
Or edit a default group policy object for the domain. Group Policies you can find on **Linked Group Policy Objects** tab:
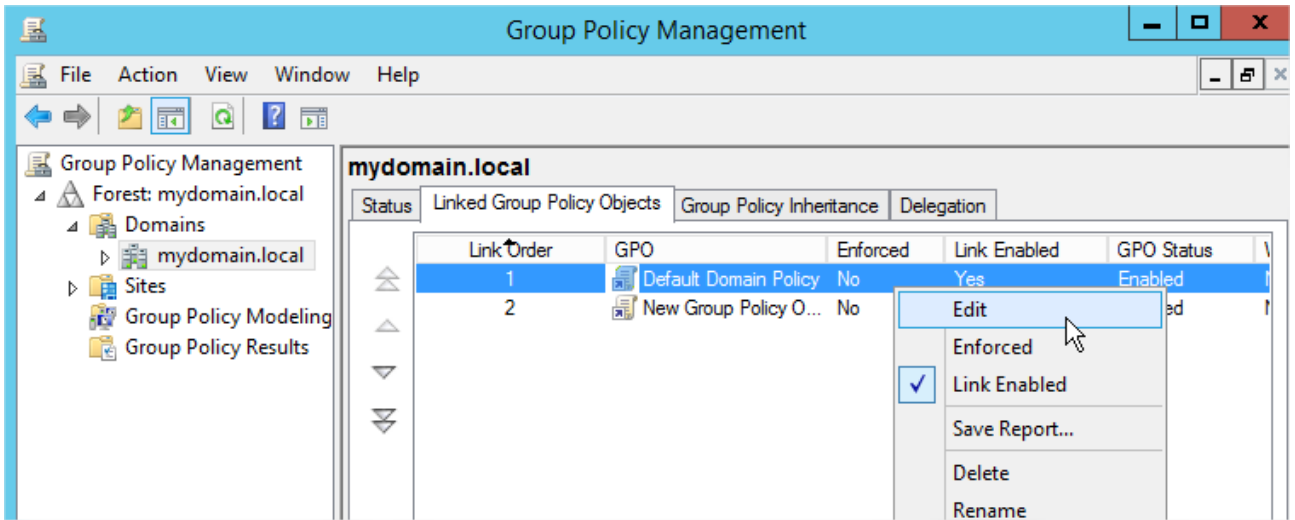
5. In the appeared **Group Policy Management Editor,** expand the left tree: **Computer Configuration -> Software Settings -> Software Installation**. Right click within right pane area, and click menu command **New -> Package** from the context menu.
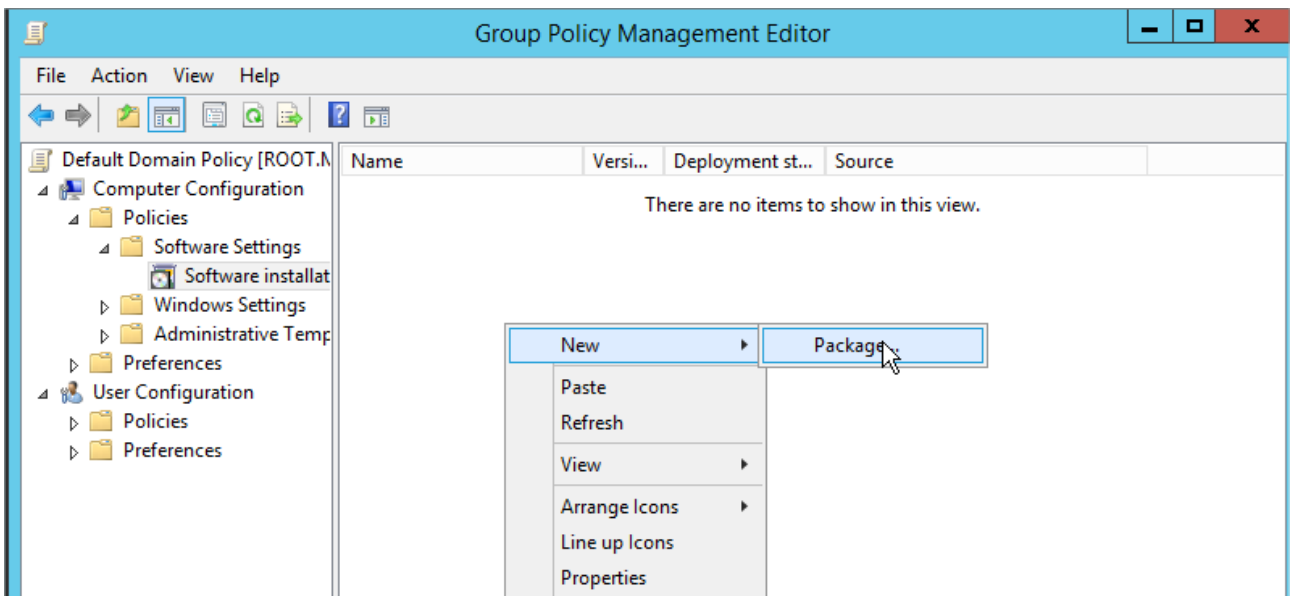
6. Browse for a network path to Net Control 2 Server MSI package, choose **"Assigned"** and click **OK.**

    Please note! You need to specify a network path to the package exactly, in a network format \\SERVER\SHARED_RESOURCE_NAME\PATH\ns.msi. This path should be valid and accessible for all user computers where the software will be installed. Most often MSI package installation fails due to the wrong path to the package.

http://www.netcontrol2.com
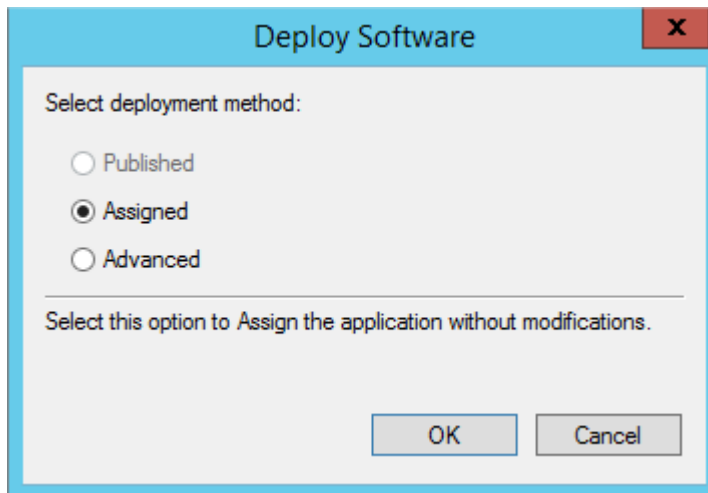
7. The procedure of software installation through Active Directory GPOs requires availability of the package that is being installed, at the moment of GPO installation on student computers. This means that **"Always wait for the network at computer startup and logon"** policy must be enabled.

   You can enable this policy in the same Group Policy Object. Open **Computer Configuration ->Administrative Templates ->System ->Logon ->Always wait for the network at computer startup and logon** policy; enable it.
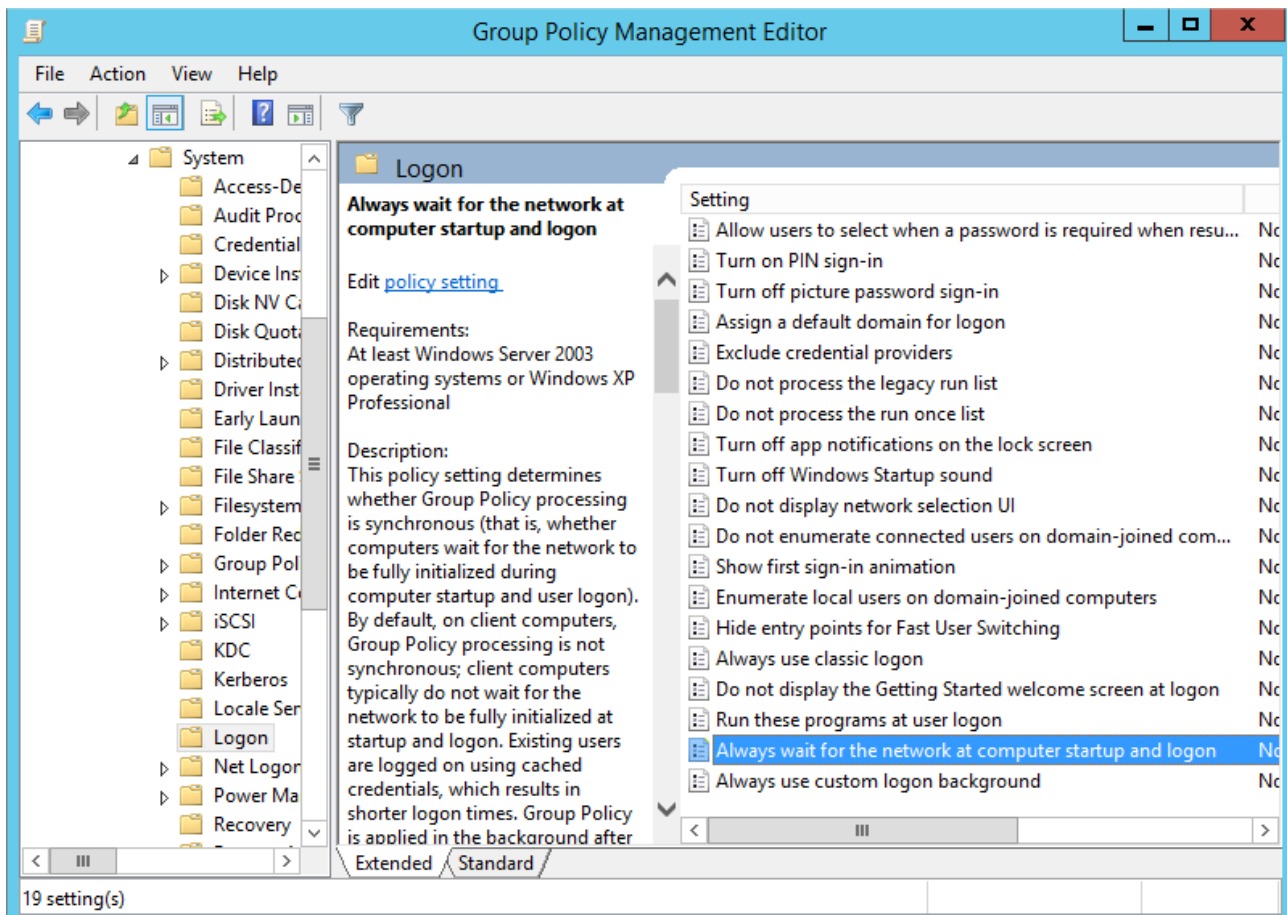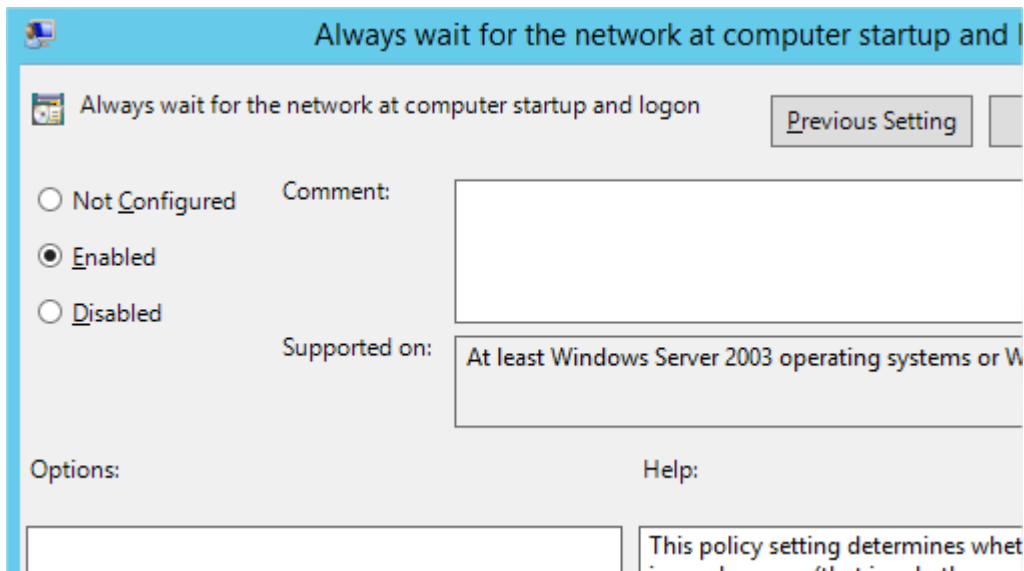
8. Close **Group Policies** and restart user computers.

Net Control 2 will be automatically installed when a User computer applies domain settings at Windows startup and logon.

To remove Net Control 2 software from user computers, simply remove the Net Control 2 package from the Software Installation list as described in p.5 of this chapter.

To update Net Control 2 software on user computers, remove the Net Control 2 package from the Software Installation list as described in p.5 of this chapter and add a new package.

I. Setting up the Net Control 2 Client and Teacher settings with Active Directory Administrative templates.

Several settings of Net Control 2 Client Module and Teacher module may be set up remotely using Active Directory Group Policies of Windows Server 2003-2016.

1.	Download the administrative templates:
http://www.netcontrol2.com/getfile?id=nc2client.adm
and
http://www.netcontrol2.com/getfile?id=nc2teacher.adm

2.	Open the Group Policy Management console: for Windows 2008/2012 click Start -> Administrative Tools -> Group Policy Management.

3.	Select a policy where the settings should be deployed. For example Default domain policy.

4.   Right click it and select **Edit** menu command to open **Group Policy Management Editor**.

5.   In the editor, at left pane open **Computer Configuration -> Policies -> Administrative Templates**.

6.   Right click the **Administrative Templates** option and click **Add/Remove templates** menu command:
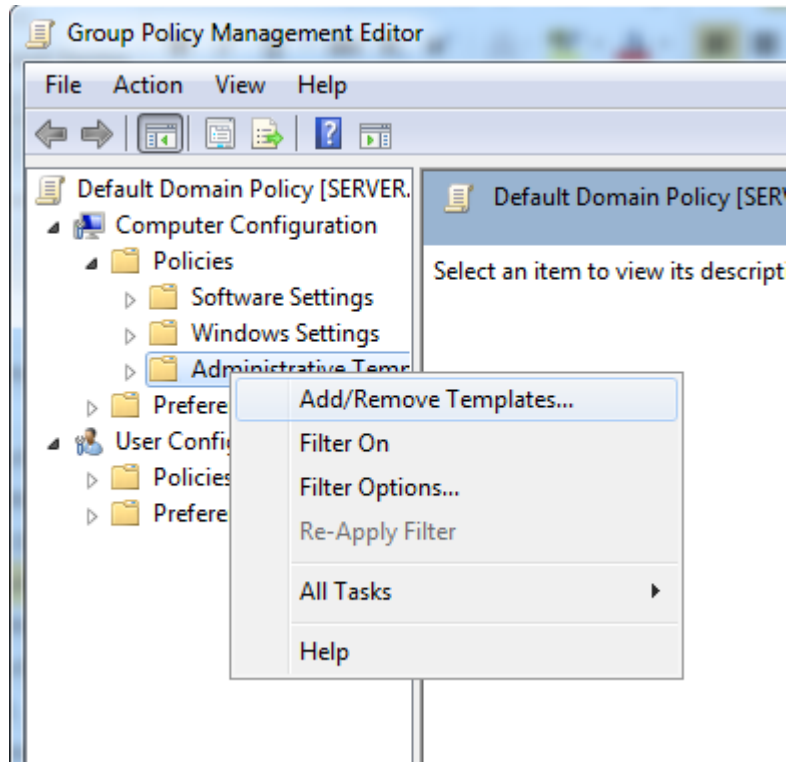
7.   In **Add/Remove Templates** window click **Add** button to add Net Control 2 template files downloaded in p.1

8.   When templates are imported you can change Net Control 2 settings in **Computer Configuration -> Policies -> Administrative Templates -> Classic Administrative Templates (ADM)** section. Settings in 32 and 64 bit operating systems are stored separately and therefore the administrative templates provide separate sections for 32 and 64 bit operating systems. If you have mixed computers with 32 and 64 bit operating systems, both sections should be configured.
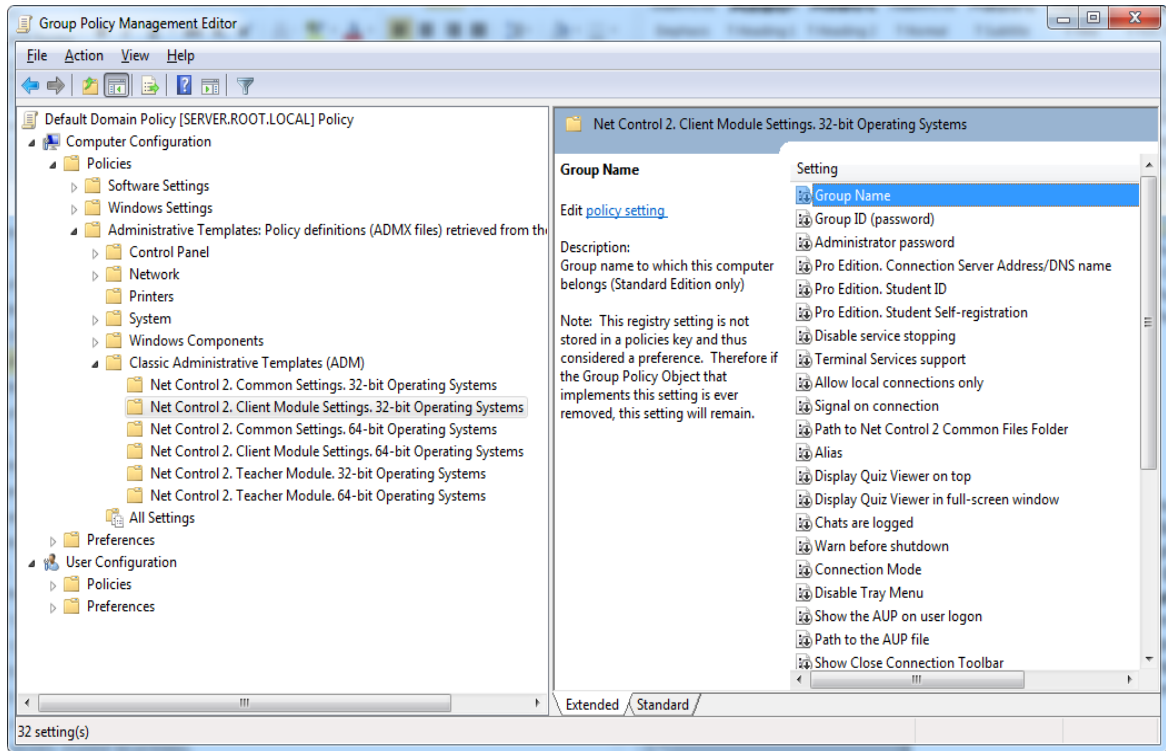
J. Script installation with standard installation package.

The standard executable installation package provides a mechanism for a non-interactive centralized installation and deployment the package in large networks, Active Directory and SCCM environments with installation scripts.

Please note! The installation script <u>must have administrative</u> elevated or system privileges in the system, otherwise the package cannot be installed. Particularly, for Active Directory scripts you need to use Computer Configuration section of AD GPO, but not User Configuration (which may not have the necessary privileges).

Script installation is unavailable for **Demo-versions** of the software.

The installed package may be pre-configured in the process of installation by passing to the setup package special command line parameters:

/SILENT – a required for script installation option, runs the installer in a non-interactive mode, the setup program will display the progress of the installation on the screen but will not wait keyboard or mouse input from a user.

/COMPONENTS=”adm user comm drv lspm\ho” - space-separated list of components, which should be installed. Possible values:

      adm – Teacher Component

user – Student Component, install as service (default)

comm– Common components (required)

drv– Install NC2 Video Hook Driver (required for Remote Desktop, Broadcast Desktop and Desktop Recorder tools)

lspm\lsp– Install Internet Control Engine in Mode 1: as Internet Explorer plugin and with internal control of Internet Explorer. In this mode Net Control 2 can control only websites visited in Internet Explorer browser, and cannot control other browsers like Firefox, Chrome or Safari. This mode is recommended if you experience issues with the default Mode 2.

lspm\ho – Install Internet Control Engine in Mode 2: as protocol layer module and Internet Explorer addon (this mode is recommended).

/NORESTART – Do not restart computer automatically after installation

Optional parameters:

/USERCONNECT:*teacher1;teacher2;192.168.1.11;* - for the student module installation, sets up teacher computers that will be connected to this student, teacher1, teacher2, 192.168.1.11 – are network names and IP address of teacher computers. Names/addresses should be separated with a ";" sign.

/BDCHANNEL:NN – specifies Broadcast Desktop channel. Instead of NN please specify the number of Broadcast Desktop channel. When not specified, uses the default channel.

/GROUPNAME:*Name* -– specifies Group Name for this computer. Used only if the software was not earlier installed on this computer.

/GROUPID:*Password* –specifies Group ID (password) for this computer. Used only if the software was not earlier installed on this computer, valid for direct connections only.

/ADMPASS:*password* – set up administrator password for the student module.

/ADV:ShowMiniToolbar=0 – disables Net Control 2 toolbar on student computers.

/ADV:InverseScanEnabled=1 – enables finding the student computer from teacher computers

/ADV:SearchPasswordOpen=*password* – sets up Connection Password

/ADV:ConnectByTeacherID=1 – for a student module, enables connecting teacher computers by Teacher ID

Example 1. To install the software, Student components only in default configuration, execute the following command line:

D:\Downloads\net1200r.exe /SILENT /COMPONENTS="user comm drv lspm\ho" /NORESTART

Example 2. To install Teacher components of the software only, execute the following command line:

D:\Downloads\net1200r.exe /SILENT /COMPONENTS="adm comm drv" /NORESTART

D:\Downloads should be replaced to the actual path to the installation package on a local computer.

K. Student components installation using Net Deploy tool.

Requirements:

- A network with domain;

- User who is installing the software remotely must be an administrator of the computer where the software will be installed (have administrative privileges);

- The Adminstrative Shared Folder (Remote Admin, ADMIN$) resource should not be disabled;

- Net Control 2 software is already installed on the Teacher computer;

The Remote Admin resource.

Remote installation of Net Control 2 Classroom software with built-in NetDeploy tool is possible only if Administrative Share ("ADMIN$") resource is enabled on computers of the network.

1. How to check whether Administrative share is enabled on client computer
On a student computer open Command Prompt window (press Win+R on the keyboard and type cmd.exe)
in the Command Prompt window type:
net share
verify that the ADMIN$ shared resource is in list of resources.

2. How to enable Administrative share resource:

Windows 7-10:
Add the following setting to the system registry of every client computer:
Key: HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\Policies\System
Value: LocalAccountTokenFilterPolicy **:DWORD** = 1
To apply changes after altering this setting you need to restart the client computer.

To install the software:

1. Run the teacher module of Net Control 2 Classroom;

2. Click on Top toolbar's command **Net Deploy** (**Advanced Tools** tab);

3. In **Network Neighborhood,** find and select computers where the software should be installed;
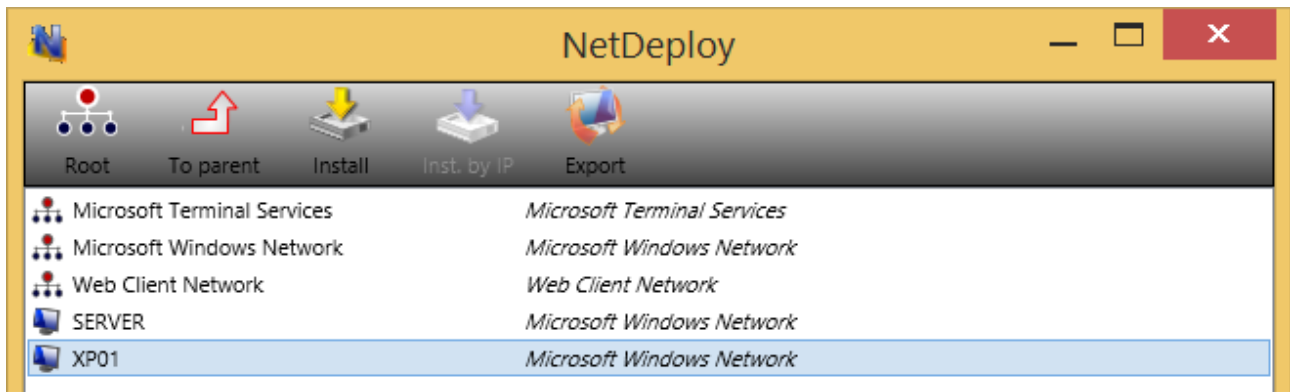
4. Click **Install** (**"Install Net Control 2 on Selected Computers"**) button on the top toolbar;

5. Specify local path to *Net Control 2 Setup installation package;*

6. Specify components of the software that should be installed;

7. Specify Advanced options when necessary;

7. Click the **OK** button.

The program will try to connect to the remote computer and install the software. If the login name and password of the remote computer's administrator differs from the name and password of currently logged in user, Net Control 2 will prompt to enter the correct login name and password on the remote computer.

This method of installation will fail if:

–   Your network does not have domain

–   You do not have local administrative privileges on remote computer

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– Provided login name and password of administrator is incorrect

L. Update.

Manual update through the teacher module

To update the teacher module of the software to a higher version, most often it is enough to close the teacher module, download the latest installation package from our website (please verify that you are downloading the same edition of the software), and install it over existing package without removal of the previous version.

To update the student module remotely, from the teacher console:

o download the latest installation package or use the package that you have used for installation of the teacher module;

o in the teacher console of Net Control 2 Classroom, select student computers that should be updated;

o click the main menu command **N ->Help and Support ->Update Client**

o specify a path to *Net Control 2 installation package* on your computer.

The package will be uploaded to the student computers and installed there.

Automatic update

Automatic update provides a simple interface to update the software on teacher and student computers automatically.

Please note! Automatic update does not include all versions of the software, we reserve it for critical updates only. It is still possible that a newer version is available on our website and you can use it using manual update methods.

Automatic update feature must be enabled in the teacher module settings: **N ->Options -> Options, on Update page, Download Updates Automatically** option should be enabled
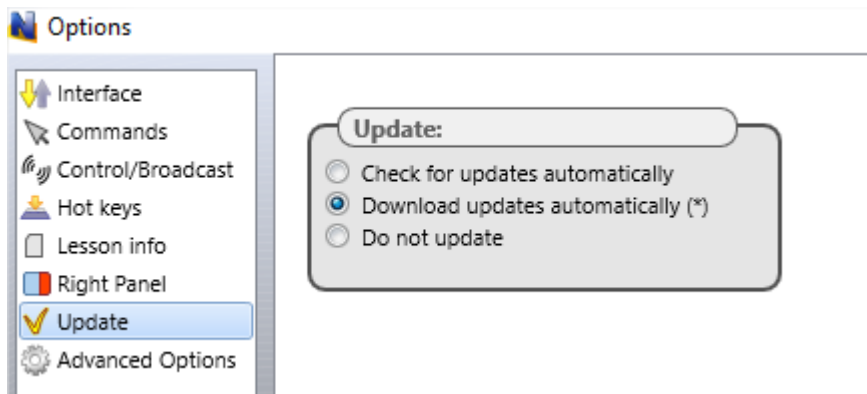
The software will check Net Control 2 update server every 14 days for available new versions. If any update is found, the program will download it to the teacher computer and will deploy it to the user computers as soon as they are connected to the teacher computer.

Please note: To change the Update options, the program should be started with administrative privileges in the system. For Windows 7-10, you need to run the program as follows:

- right-click on the Net Control 2 Classroom icon on Desktop or in Start ->Programs menu

- click menu command **Run As Administrator**

- confirm execution

MSI Packages

If the software was installed through **Active Directory Group Policies** and a MSI package, to update the software on student computers, remove the older package from the Group Policies Object, and install the new package. Please see chapter H of this manual.

M. How to disable Groups tab of the teacher console.

In several cases the Teacher may need to select some default group for a teacher and disable access for teacher to other groups. To prevent access to Groups tab and Groups functions:

- Select the default group, to which a teacher will have access;

- Click the main menu command N -> Options -> Options;

- On Interface tab, click the Lock Current Group button;

- Specify some password, which will be used for unlocking the Groups tab;

- Click OK.

To unlock Groups tab, in the same manner click the Unlock Current Group password on Interface tab of the Control Options.

N. How to forbid access to some teacher module features.

Net Control 2 Teacher Module may be specially configured to hide or enable its functionality for different groups of users. For example, ordinary teachers will use only part of its features, while IT administrator will have access to full range of features.

This is realized through the **View Profiles** tool. The Administrator may create several view profiles, protect some profiles with a password or mark some profiles as **"default"**, i.e. make them active automatically at startup.
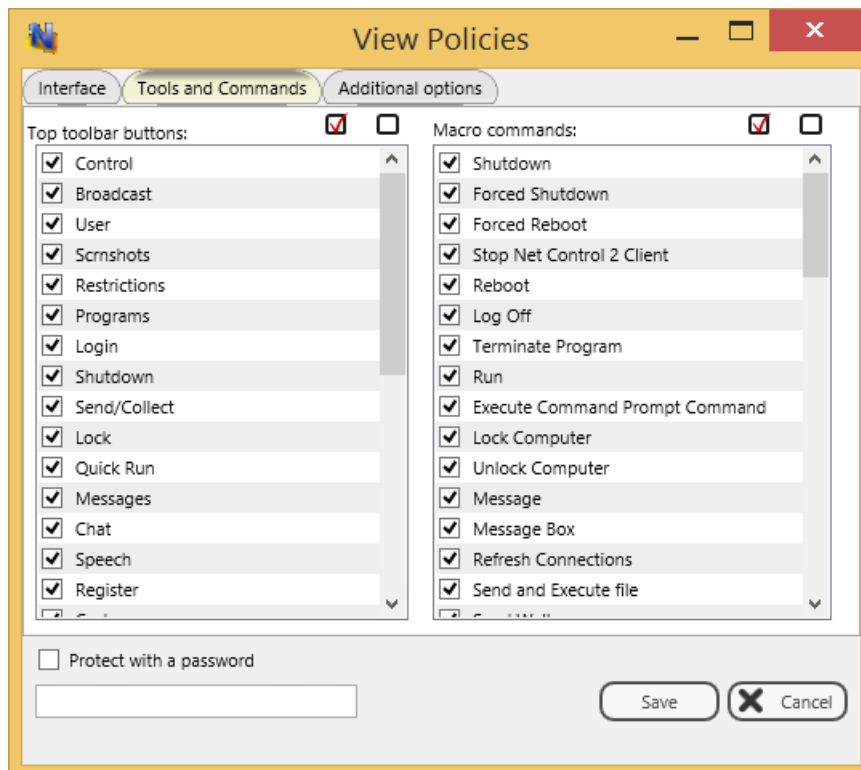
1. To create a custom View profile:
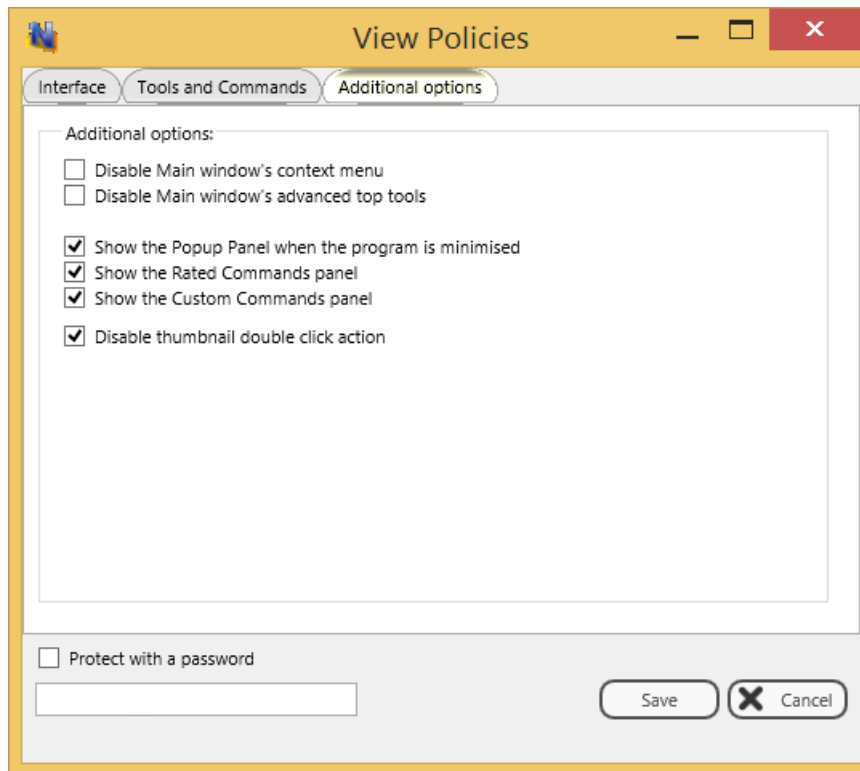
  – click menu command **N ->Options ->View Profiles**.

  – Click the **New** button.

  – On the **Policies** tab, check only those window elements *(buttons, fields, menus)*, which should be visible (available for user) in the new configuration:
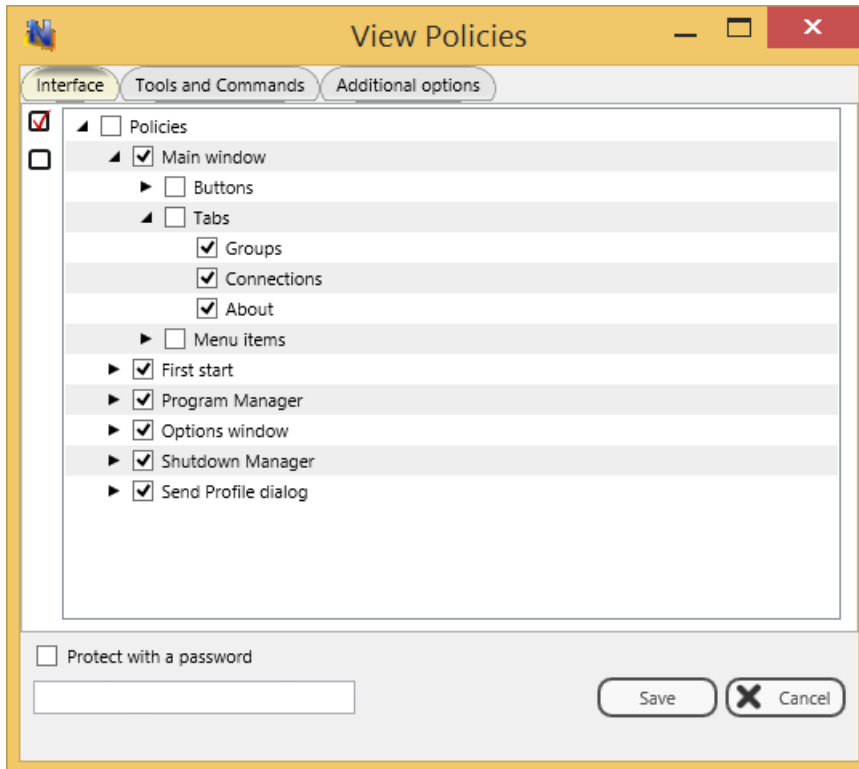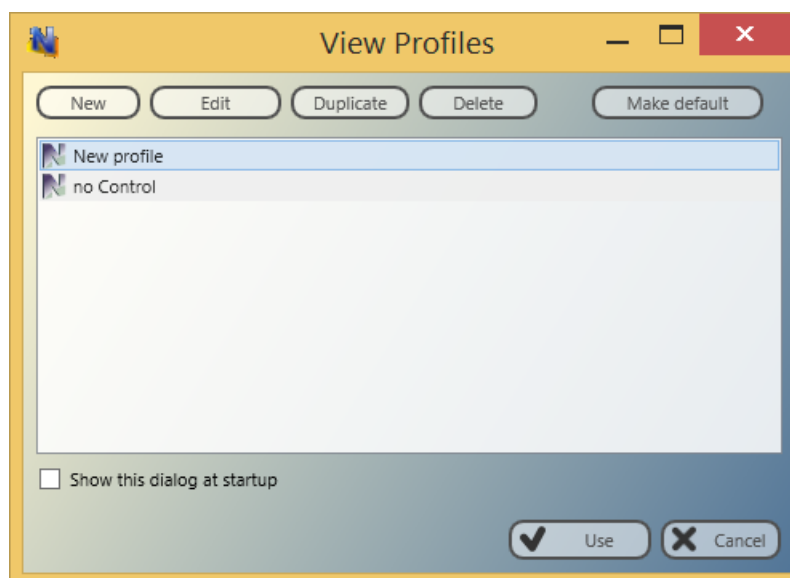
– on the **Tools and Commands** tab you can set up what commands and macro commands will be available for teachers:

- when a new profile is created, click the **Save** button to save the profile
- specify some name for profile

- created profile should appear in the list

In addition, you can make any profile **"Default"**. In this case, the profile will be loaded and applied automatically at start up of Teacher Module.

If the **Show this dialog at startup** option is enabled, Net Control 2 Teacher will display profiles list at startup with the possibility to select one of available profiles.

If any password was specified in the profile, Net Control 2 Teacher will prompt for this password before applying selected profile.

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O. How to protect access to Net Control 2 Classroom with a password.

To protect access to Net Control 2 Teacher, click the menu command **N ->Options -> Interface -> Lock password,** specify the password, and click **OK**.

To prevent stopping Net Control 2 Student service or configuring its settings on the Student computer, you need to enable the Administrator password:

- click **N** (Net Control 2) icon in the **System Tray**, then click **Configure** button. In the **Configuration** window, on **Security** tab, in **Administrator Password** field, specify new password.
  Please note: The password will be applied and stored only in the registered version of the software. Particularly, this feature is not available in Public Trial version.