
Net Control² **SmallClass Edition**

INSTALLATION AND CONFIGURATION GUIDE



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Based on version 11.0

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General information

Net Control 2 SmallClass Edition consists of two main parts - *Teacher Component* and *User Component*.

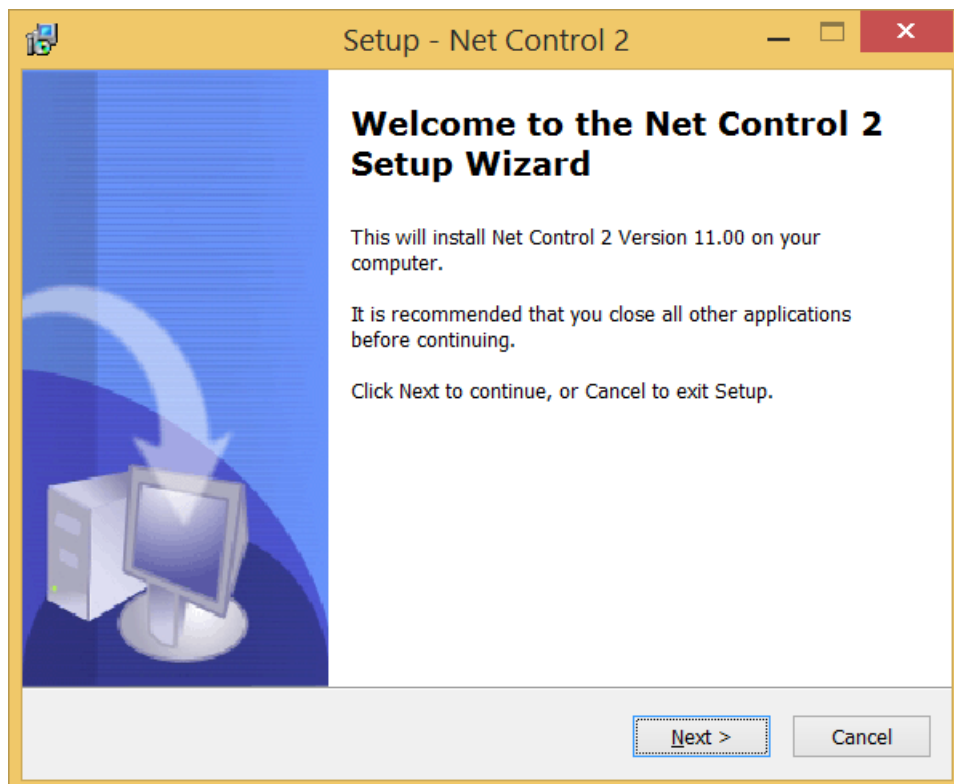
Teacher Component should be installed on each computer that will be used to control other computers.

User Component should be installed on each computer that you wish to control.

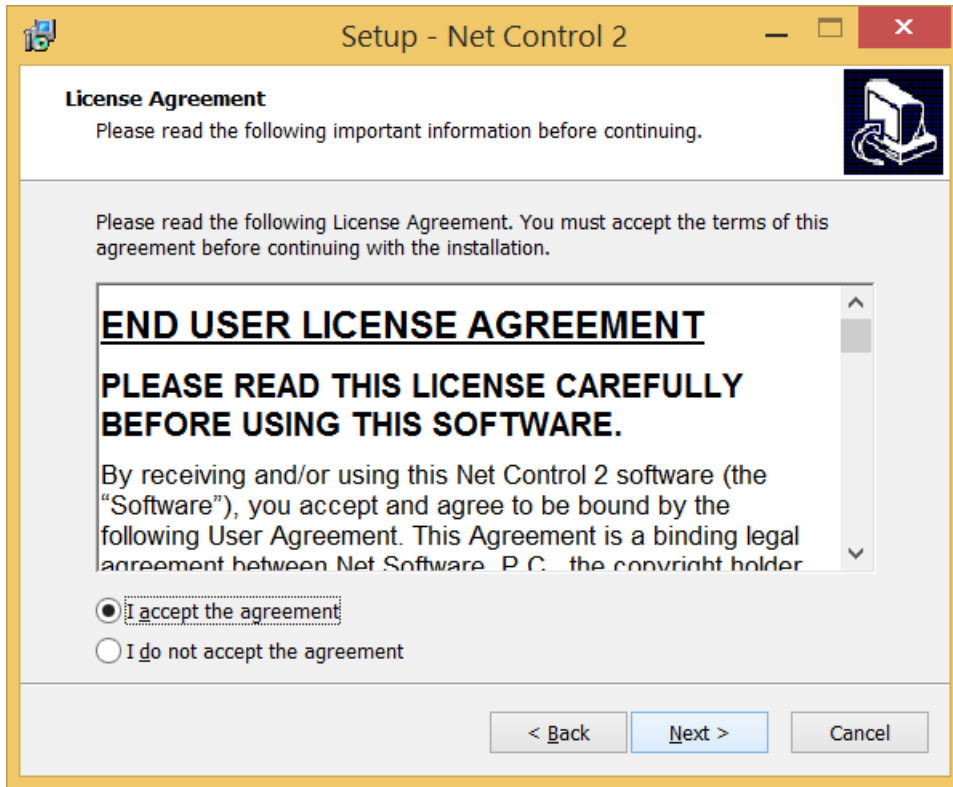
Any combination of components may be installed on the same computer.

A. INSTALLATION USING STANDARD INSTALLATION PACKAGE

1. Run the Net Control 2 Installation Package (e.g. net1100sc.exe file).

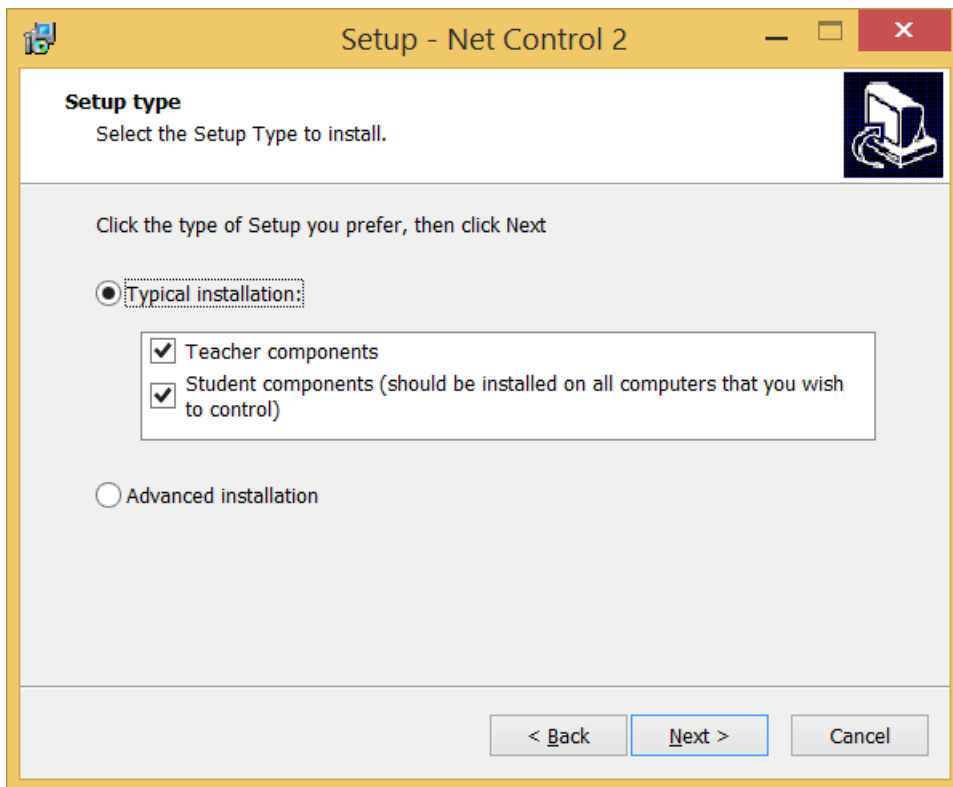


2. Read and accept the End-User License Agreement.

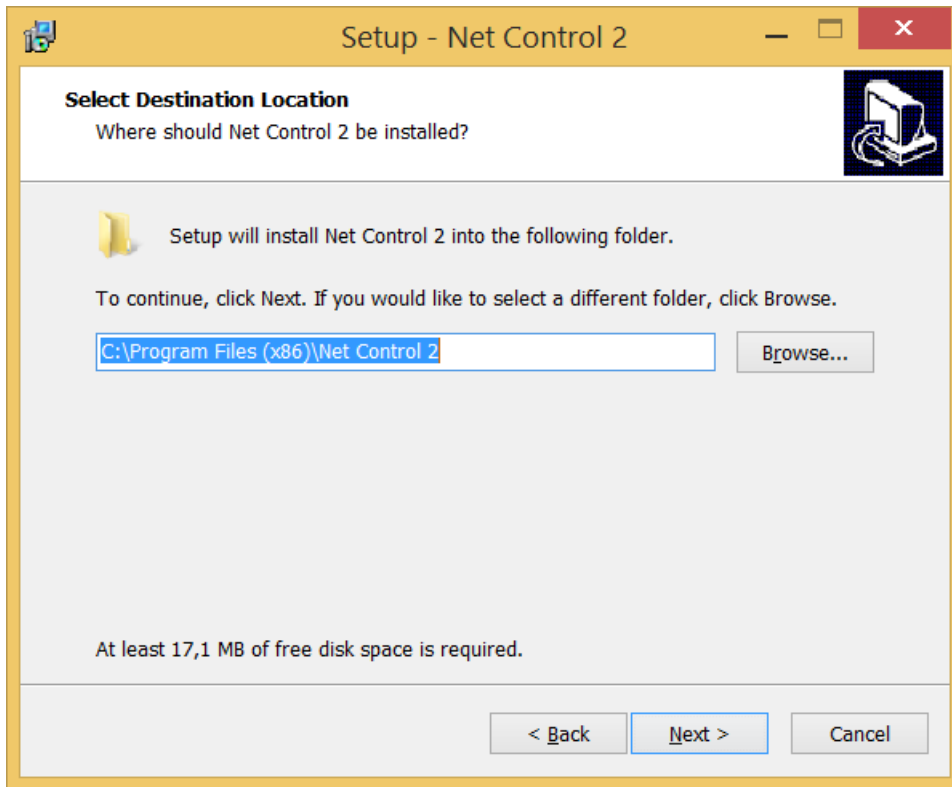


3. On the **Setup Type** page, select **Typical Installation** and specify components, which should be installed:

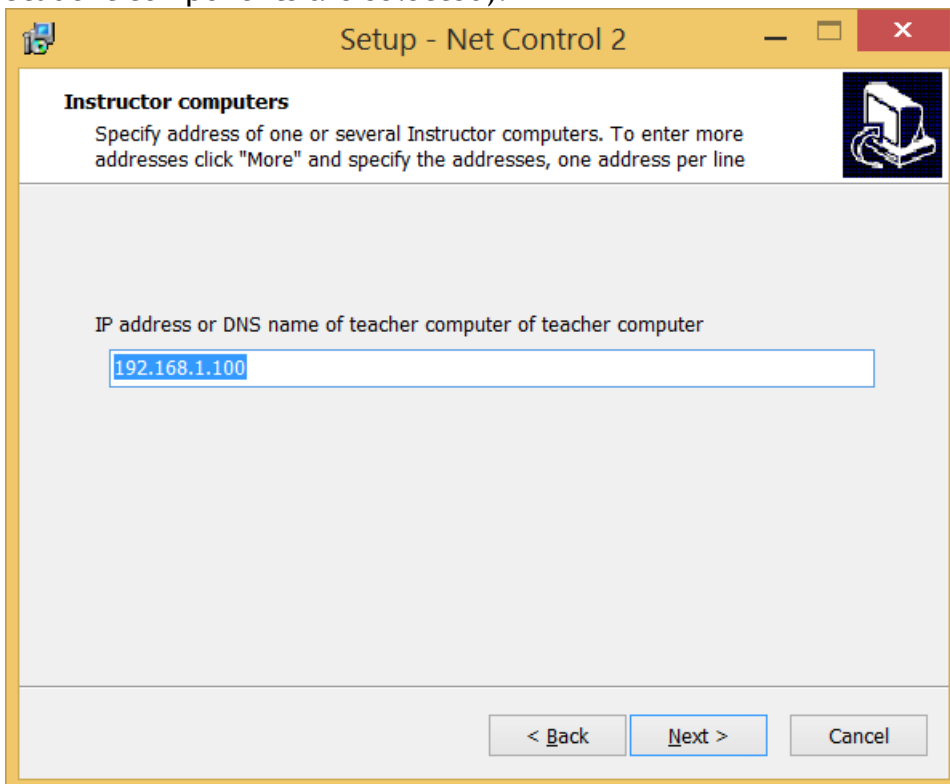
Teacher Components - check this option if you wish to install the teacher components;
Student Components - this component should be installed on student computers;



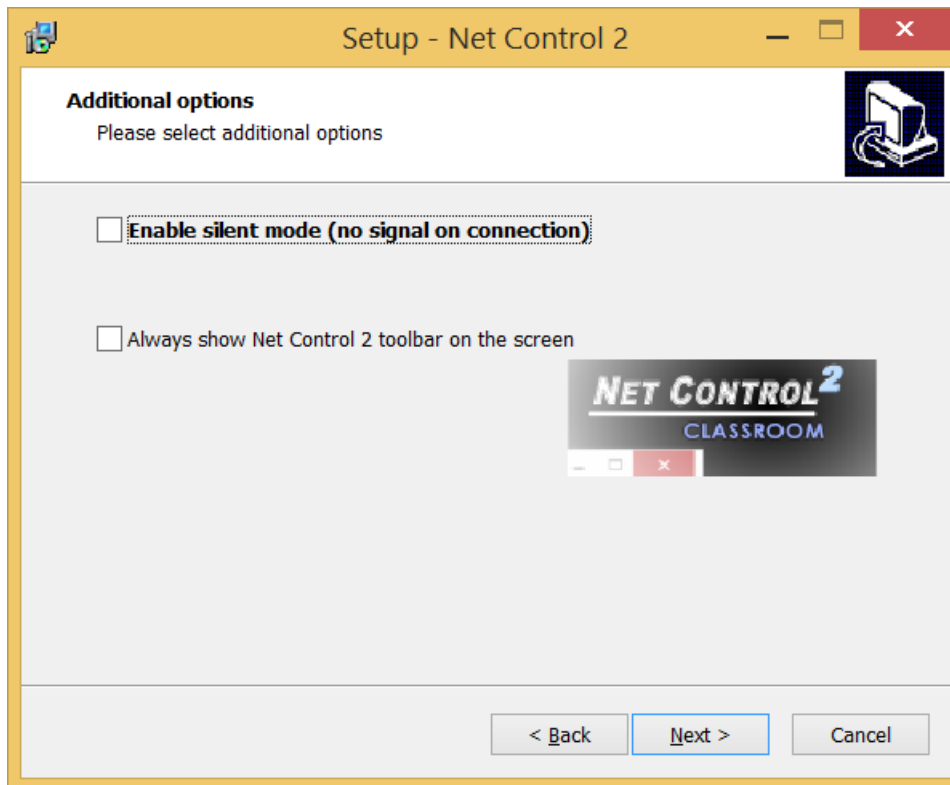
4. Select the folder and Start Menu folder (optional) where the Net Control 2 software will be installed.



5. Specify address or computer name (DNS name) of your teacher computer (if Student components are selected):



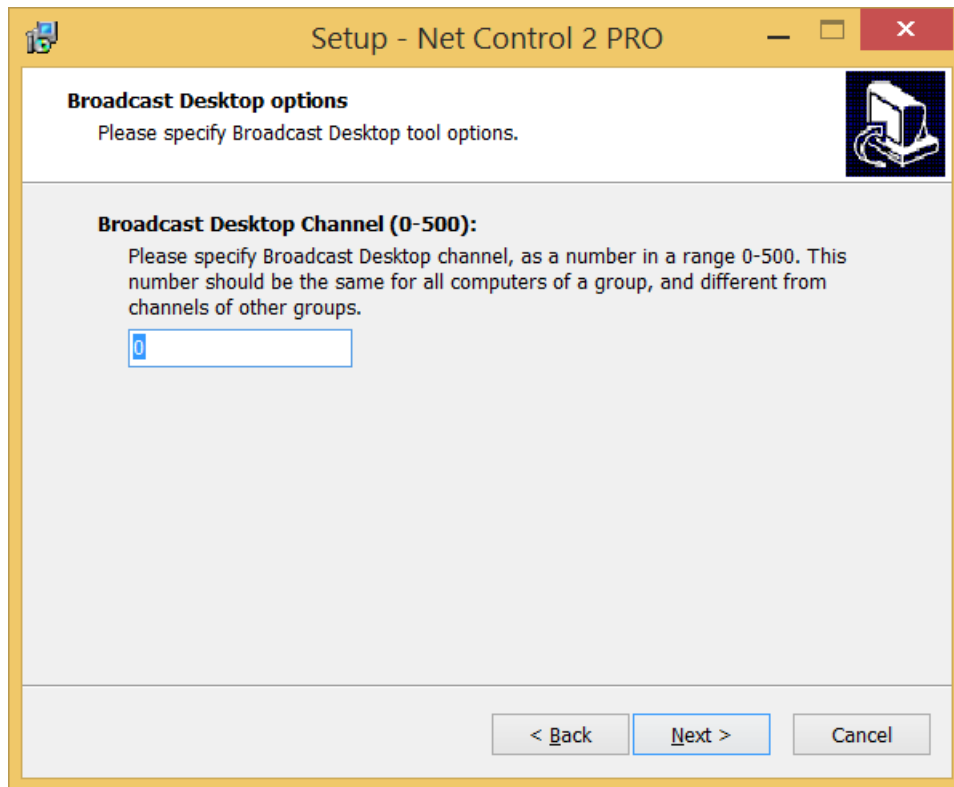
6. Enable or disable Net Control 2 Student Console toolbar:



Enable silent mode (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 text notifications.

The toolbar is a button that is always shown on the screen of a student computer, at top-right hand corner of the screen (by default); the user can click this button to open instantly the Student Console.

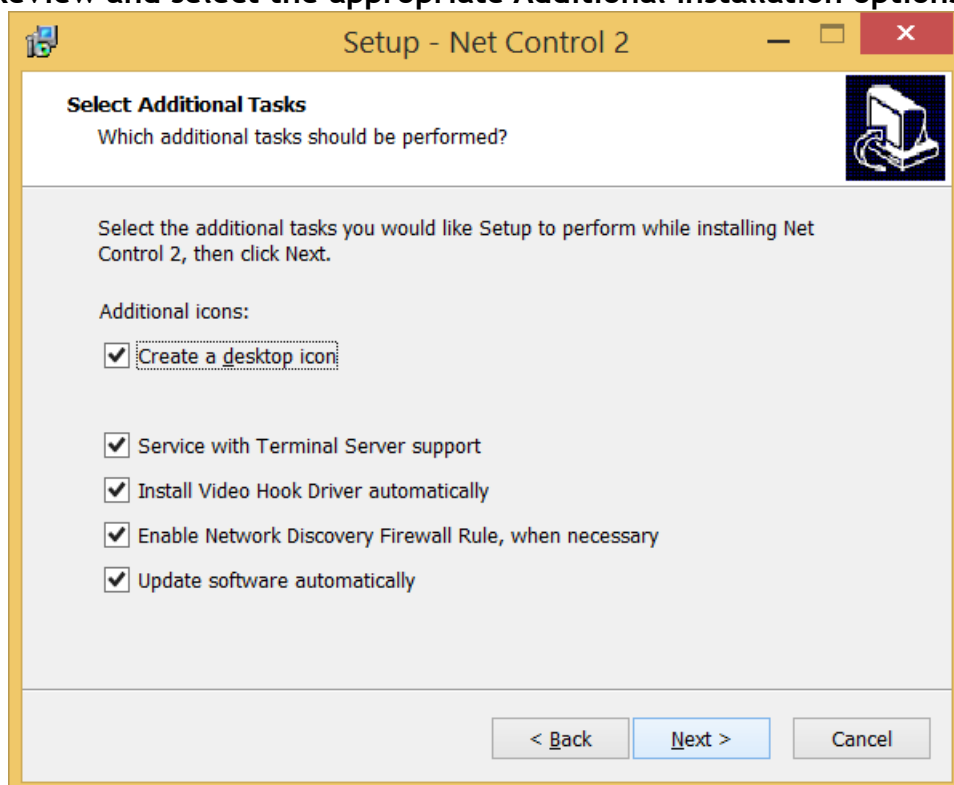
7. Broadcast Desktop options (only if Teacher components were selected):



The **Broadcast Desktop Channel** number should be different for every lab of your network, otherwise the transmission sent in one classroom, may interfere with transmissions in other classrooms.

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

8. Review and select the appropriate Additional installation options:



Service with Terminal Server support - when enabled the student module will support background user sessions of Terminal Server (Windows Server RDP sessions, Remote Desktop), sessions created by third-party server software, like nComputing, WYSE and others.

Enable Network Discovery Firewall Rule - enables the Network Discovery rule of Windows Firewall in Windows Vista/2008/7. 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.

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.

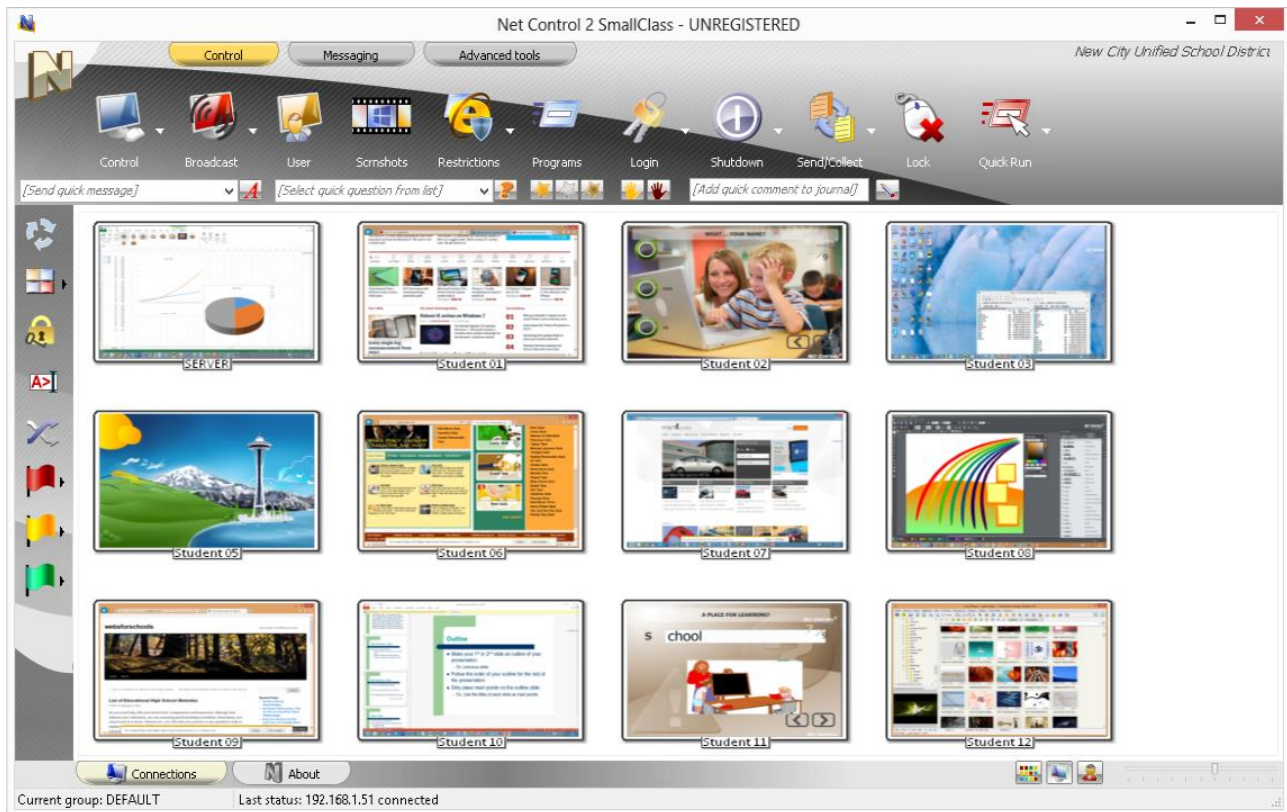
During the installation, Net Control 2 will automatically install the Video Hook Driver, which is a required component for Remote Desktop, Broadcast Desktop, and Desktop Recorder tools. During the driver setup, the screen may flicker several times.

9. Restart the computer after installation.

B. TEACHER CONSOLE

To control student computers on teacher computer open the teacher console (click Net Control 2 icon on Desktop or use Start -> All Programs -> Net Control 2 -> Net Control 2 command of Windows Start menu).

If the software was installed on student computers properly and IP address (DNS name) of the teacher computer (as described in p.7 of previous chapter) is correct, within 20-30 seconds the teacher console should be filled in with student connections:



To control User Computers, select them in the list and apply a command from the Top toolbar, Right Panel (when present), N menu -> All Tools or Commands menu.

Detailed description of commands and features you can find in Net Control 2 Commands and Features Guide (<http://www.netcontrol2.com/getfile?id=GUIDE210ST>)

C. DETAILED CONFIGURATION OF CLIENT MODULE.

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

To configure User Module remotely from Teacher Component:

- select the User 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

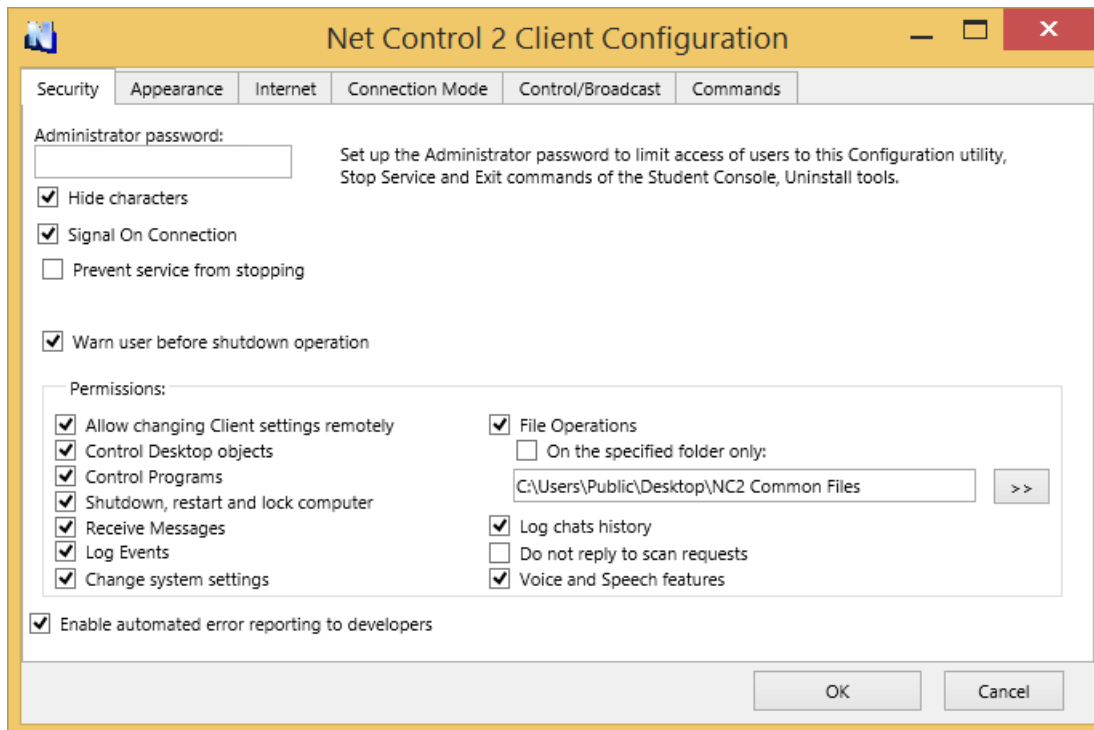
To configure User Module on User computer directly:

- right click the Net Control 2 icon in the System Tray
- then click the **Configure** button in the Student Console
- Configure options

- click OK

Configuration window:

SECURITY:



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

Disable System Tray Menu - when checked, Net Control 2 disables all commands in Net Control 2 System Tray Menu, except About menu command (available in the registered version only). System Tray icon will not be disabled.

Signal On Connection - when checked, any connection of teacher computer will be accompanied by 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.

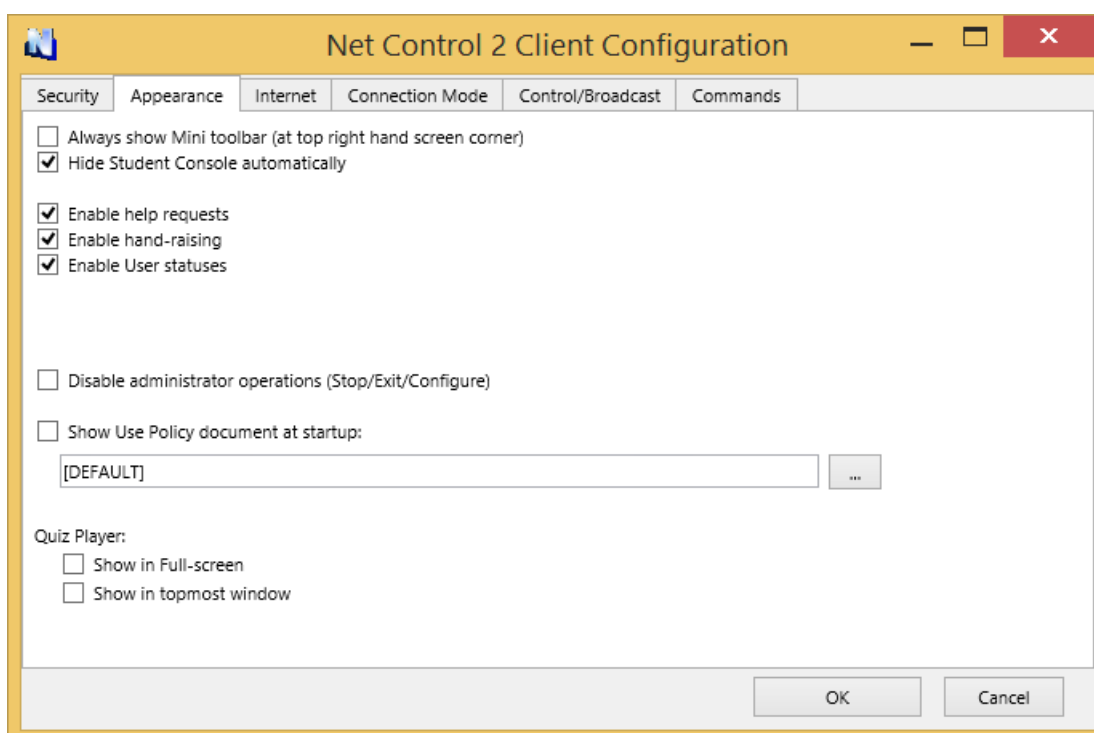
Warn user before shutdown operation - when enabled, the service will display a warning message before shutdown operation is applied.

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.
 - **Log Chats History** - chat history will be logged in *C:\Users\YOURLOGINNAME\AppData\Roaming\Net Control 2\nc2chat.log* 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.

APPEARANCE:



Always show Mini toolbar (at top right hand screen corner) - when enabled Net Control 2 Student module will show the mini toolbar (a button on the top right hand corner of the screen, always visible on the screen, for quick access to the 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.

Enable Help Requests - when enabled, user can send Help requests to Teachers via Net Control 2 Server menu.

Enable Hand Raising - when enabled, user can “raise hand” in the Student Console. This status will be visible in the teacher console, the teacher can accept the request (“to call on” the student) or reset status at any moment.

Enable User statuses - enabling “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.

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

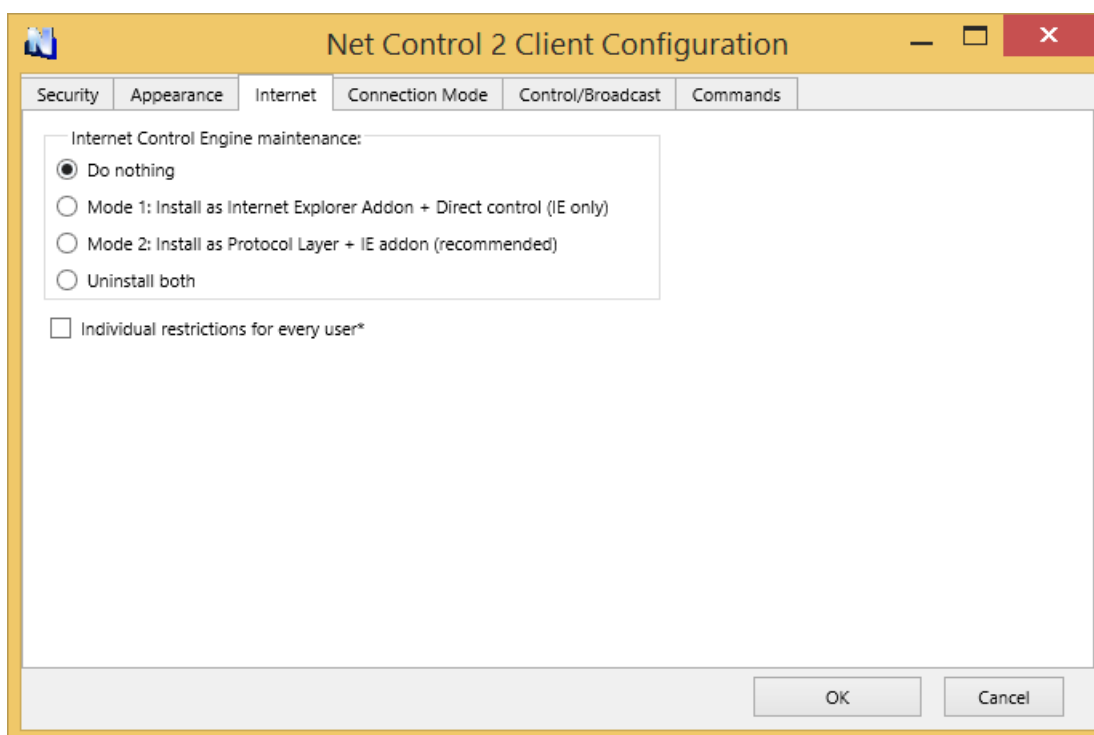
Show Use Policy document at startup - when enabled, the service will display the Acceptable Use Policy document at user logon, either default or custom (specified by the Teacher).

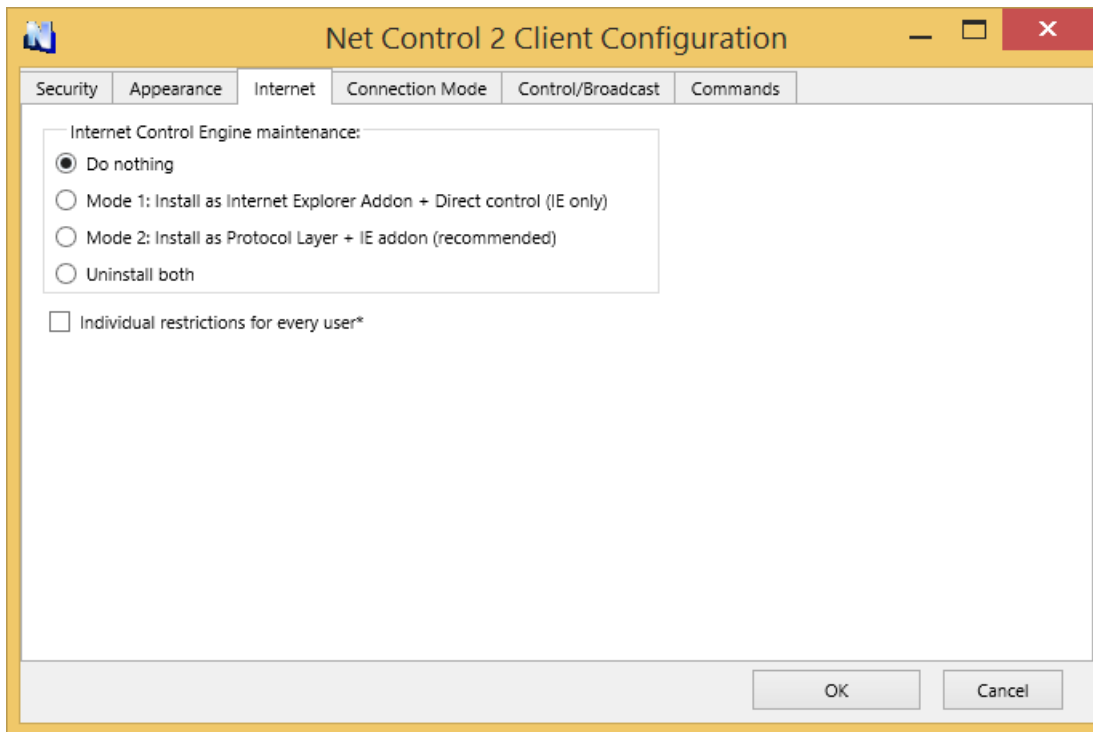
Quiz Player:

Show in full-screen - when enabled, quizzes will be played in full-screen window.

Show in topmost window - when enabled, the user will not be able to switch to other programs during quizzing.

INTERNET:





Internet Control Engine - 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. This mode is most compatible with third-party software, but allows controlling Internet traffic in Internet Explorer only.

Mode 2: Install as Protocol Layer + IE addon (recommended) – schedules installation of the Net Control 2 Internet Control Engine as a Protocol Layer. This mode is less compatible with third-party software than IE plug-in mode, but provides additional functionality and does not depend on Internet clients (browsers, e-mail clients etc.). **Use this mode if you need to make Internet restrictions working in alternative browsers, like Chrome, Opera, Safari, Firefox.**

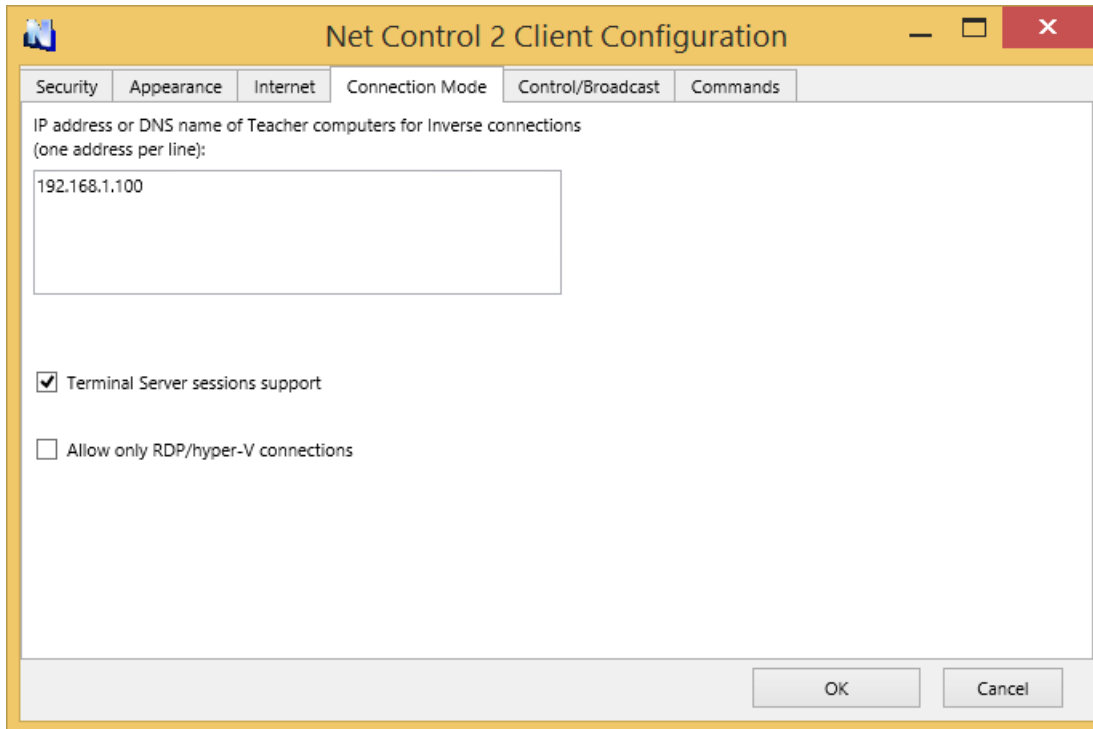
Uninstall both - Internet Control Engine will be uninstalled from the User computer. You can use this option if Net Control 2 software conflicts with other software installed on User computers. All Internet-controlling features will be disabled.

Control web-sites from the service - when checked, Internet restrictions will be applied to Internet Explorer browser, even if Net Control 2 plugins (extension) was disabled by user (in Internet Explorer 9 and higher a user can disable browser plugins at any moment by clicking the respective prompt in browser). When this option is enabled and any restrictive profile was applied to computer, Net Control 2 will automatically disable alternative browsers like Firefox, Opera, Chrome, Safari, because these browsers cannot be controlled directly from the service without browser extensions. Access to these browsers will be automatically restored once the restrictive profile is 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.

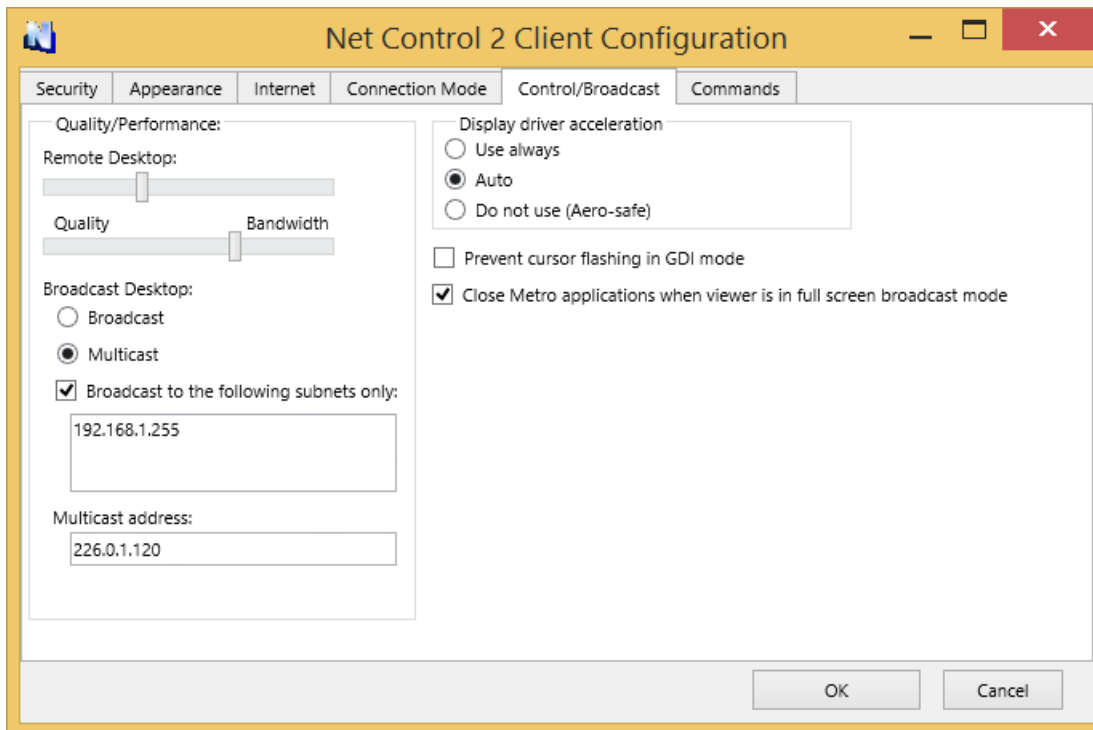
CONNECTION MODE



IP address or DNS name of Teacher computers field contains one or several IP addresses (or DNS names) of teacher computers to which this student computer will connect. In SmallClass Edition every student computer may be connected to one teacher computer only. Extra address entries will be ignored.

Terminal Server sessions support - when this option is enabled the software will open separate connection for every terminal session, this option should be enabled if computer is used as a host for thin client connections (nComputing, WYSE, RDP devices, Windows Terminal Server and Remote Desktop connections).

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 transport options:

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.

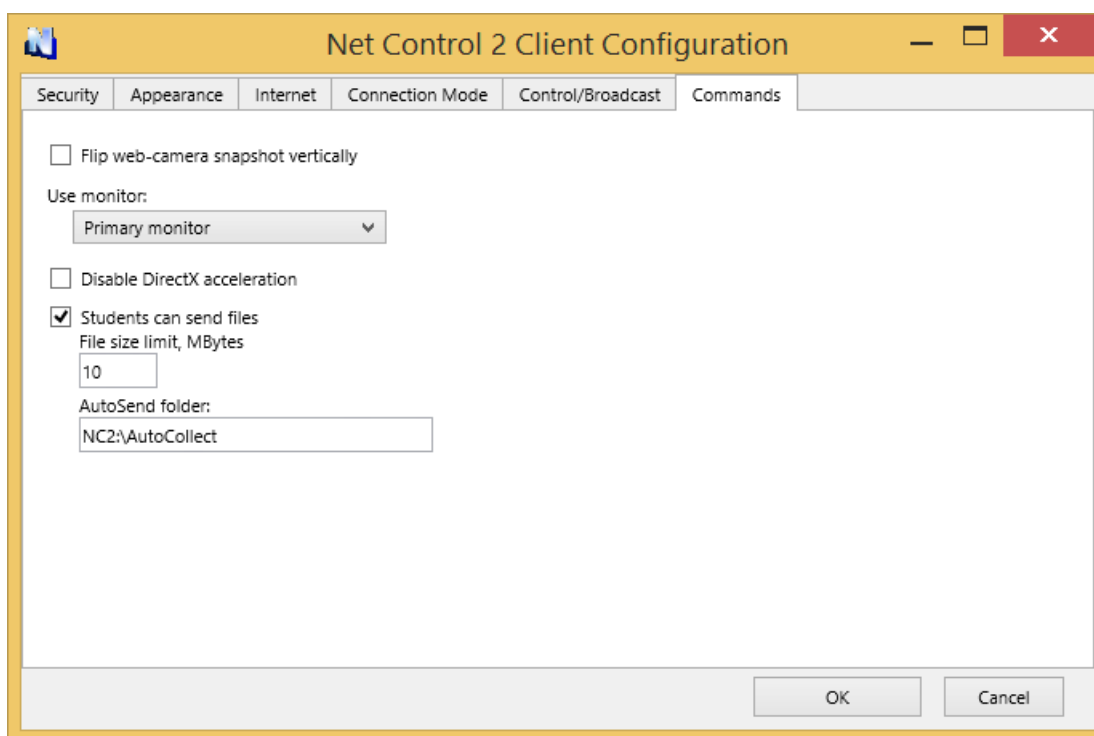
Multicast - Broadcast Desktop service will use Multicast protocol as a transport protocol. Most often this protocol has better performance and resistance to errors during data transmission if clients use Windows Vista/7/2008 operating system. If default Multicast address interfere with other network software used in your network, you can change this address and need to change it on all Student and Teacher computers.

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. When enabled, Broadcast Desktop and Remote Desktop tools activate VHD display driver only when

Broadcast Desktop or Remote Desktop session is started and will unload it automatically once the session is finished. In addition, when the VHD driver is active, Windows Vista/7 will disable automatically Aero style for windows and several Direct3D interfaces, which will be restored only after stopping the driver. Therefore, if you prefer to have Aero style active during Broadcast Desktop/Remote Desktop sessions you need to disable the driver, setting up “Do not use (Aero safe)” option.

The “Auto” option means that VHD display driver will be used in Windows XP, in Windows Vista/7 (when Aero theme is disabled), and always used in Broadcast Desktop sessions; and the VHD driver will not be used in Windows Vista/7, when Aero theme is enabled.

COMMANDS



Flip web-camera snapshot vertically - when enabled, the service will automatically flip snapshots obtained from web-camera vertically.

What monitor should be used by service - here you can select the display in multimonitor environment, which will be used as a source for screenshots and thumbnails, displayed on the teacher computer.

D. HOW TO PROTECT ACCESS TO NET CONTROL 2 TEACHER CONSOLE WITH PASSWORD.

To protect access to Net Control 2 Teacher Module, click the menu command N -> Options -> Control Options, on Interface page, in Teacher console password field specify the password, and click Change.

E. HOW TO PREVENT STOPPING NET CONTROL 2 SERVICE BY STUDENTS.

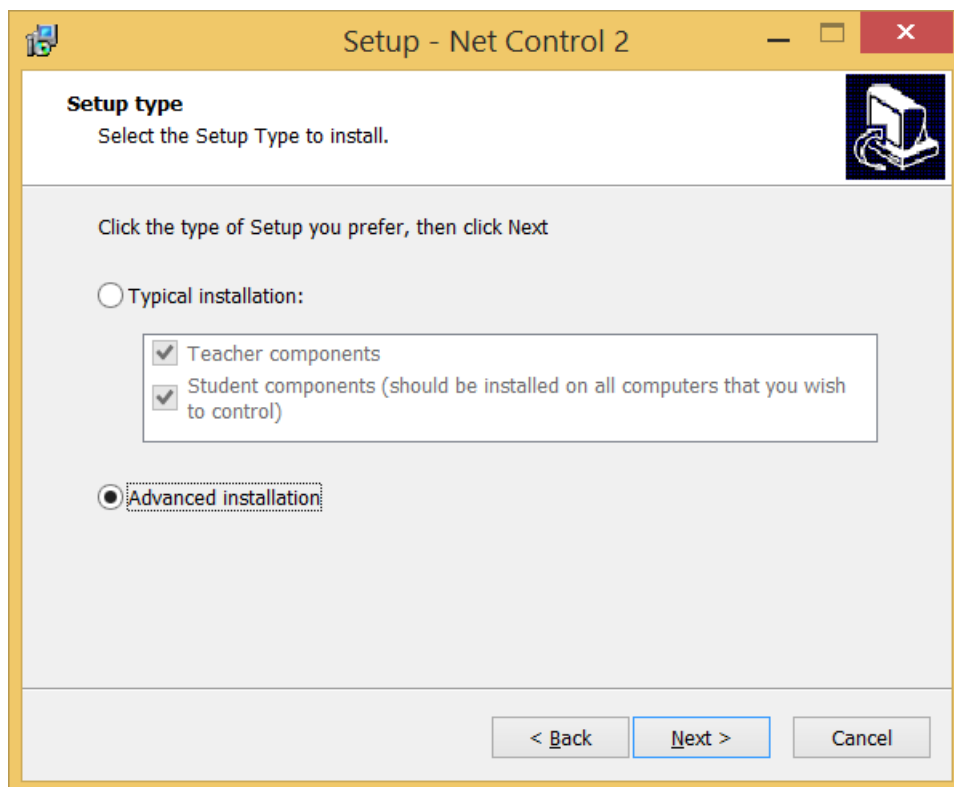
To prevent stopping Net Control 2 User service or configuring its settings on the User computer, first you need to enable the Administrator password:

- Right 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.

F. ADVANCED INSTALLATION MODE OF THE STANDARD INSTALLATION PACKAGE

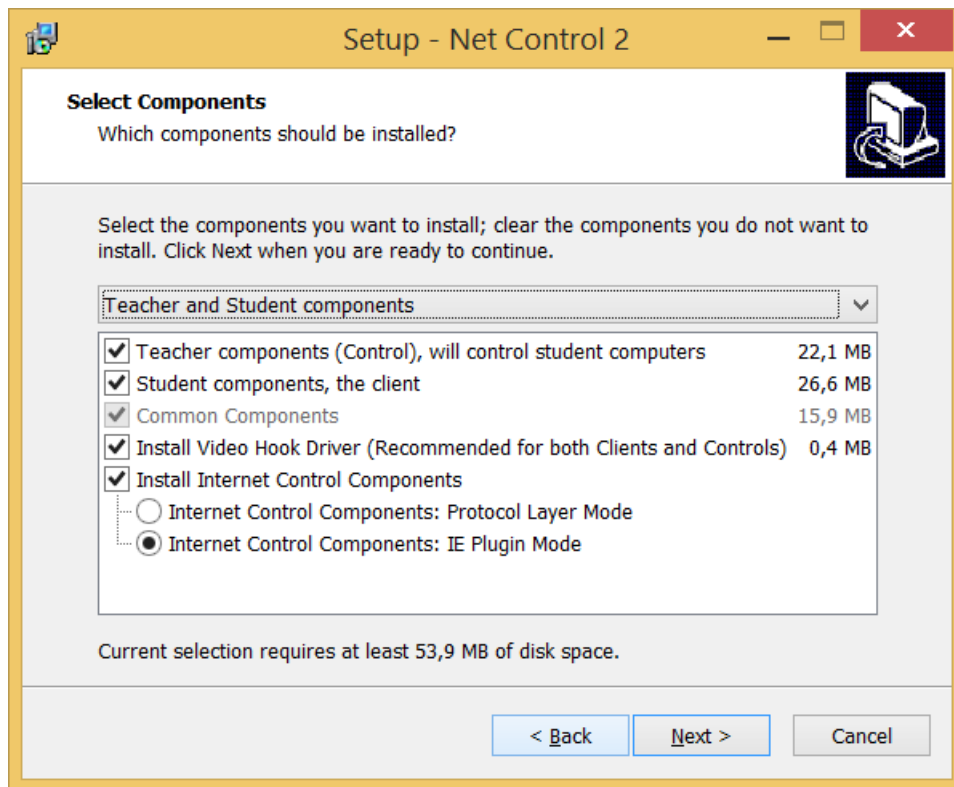
Advanced installation mode may be used for more detailed configuration of parameters of installation.

To enable Advanced installation, in the process of installation, on “Setup type” page select “Advanced installation” option:



At next steps the setup program will prompt all additional parameters as provided in **Chapter A**.

Additionally, on “Select Components” page you can select necessary components from the detailed list of variants of installation:



Additionally to Teacher and Student components you can enable installation of the following components:

Install Video Hook Driver - enables installation of Net Control 2 Video Hook Driver - special acceleration driver used by Broadcast Desktop and Remote Desktop engines. Installation of this component is recommended. You should uncheck this option only if the VHD driver interferes with some other software installed on this computer.

Install Internet Control Components - enable this option on student machine if you need to control access to Internet services on this computer. The component may be installed either in “IE Plugin Mode” or “Protocol Layer Mode”. “*Protocol Layer Mode*” is recommended.

“*Protocol Layer Mode*” provides monitoring functionality in any network software, including alternative browsers, like Google Chrome, Opera or Safari; several Internet monitoring features are unavailable in this mode. For more detailed information regarding difference in these modes please refer to Net Control Tools and Features Guide, Internet Restrictions section.

G. UPDATE.

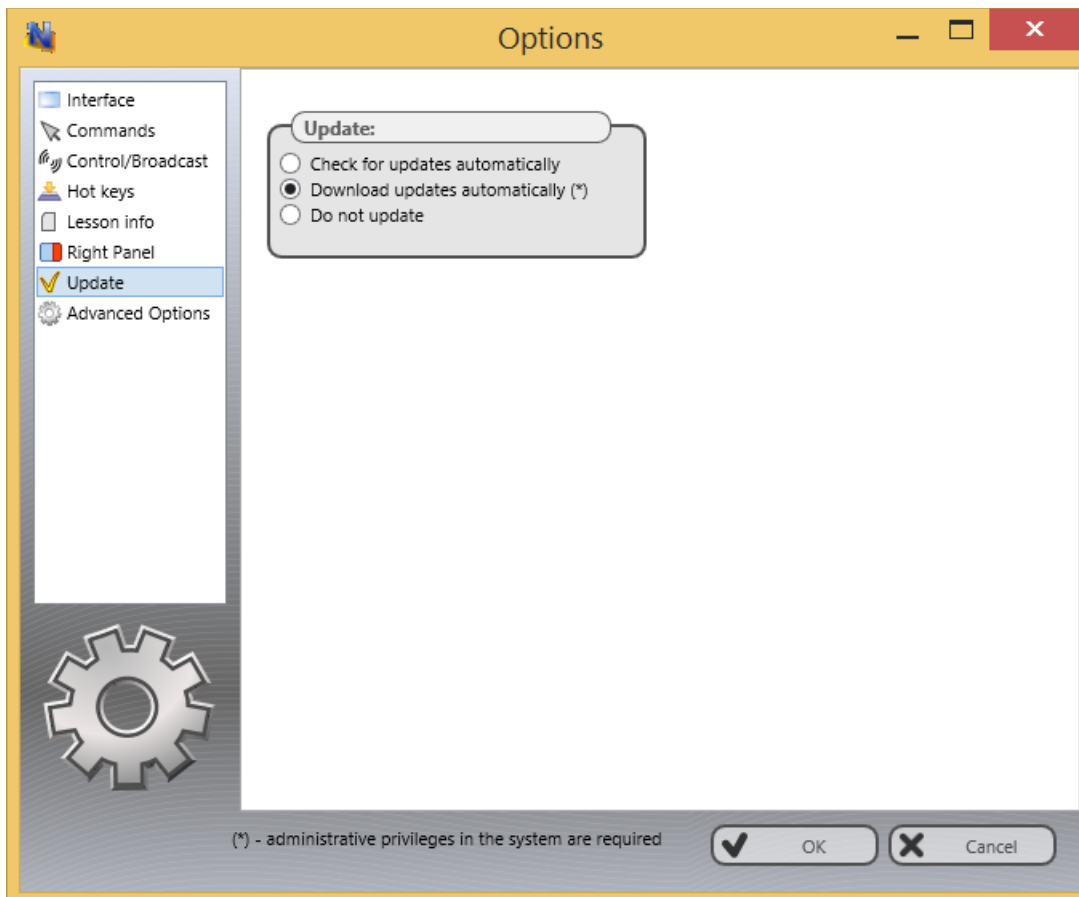
1. Automatic update.

To enable automatic update:

- In the teacher console click the main menu command N - Options - Control

Options;

- On Update page:
- Enable “Download updates automatically” option to enable automatic checking the web server for available updates.



The software will check the NC2 update server every 14 days for available updates. 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 Vista/2008/7, you need to run the program as follows:

- right-click on the Net Control 2 icon on Desktop or in Start -> Programs menu
- click menu command **Run As Administrator**
- confirm execution

2. Manual update using standard installation package.

- download the latest installation package
- in Net Control 2 Teacher Console, select the user computers
- click menu command **N -> Help and Support -> Update Client**

- specify path to *Net Control 2 installation package*

The package will be uploaded to the user computers and install. During installation, the user computer will be automatically restarted.

See also:

Net Control 2 Commands and Features guide:

<http://www.netcontrol2.com/getfile?id=GUIDE220ST>