
NET CONTROL 2
classroom

**INSTALLATION AND
CONFIGURATION
GUIDE**



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Based on version 9.0

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General information

Net Control 2 software consists of two main parts - *Administrator Component* and *User Component*.

Administrator 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. Both components may be installed on the same computer.

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

The *User Component* may be installed using one of the following methods:

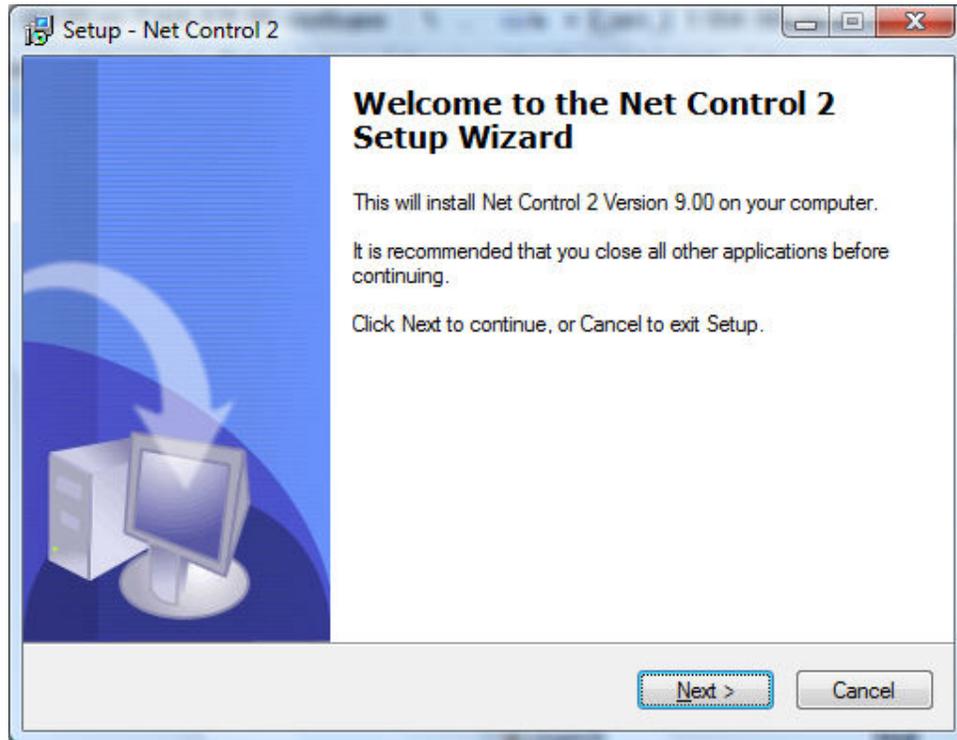
- The software may be installed manually on each computer, using the standard installation package.
- The User Component may be installed automatically through Windows Server's Active Directory/Group Policies service and using the special MSI package. The special MSI package is available by request for registered users.
- The User Component may be installed on user computers automatically through the built-in Net Deploy tool. To use the Net Deploy service:
 - your network must have a domain
 - you should have *local administrative* privileges on all remote computers where the software should be installed
 - your Windows administrator account should be protected with password
 - sharing services should be enabled in your network
 - Remote Administration Shared Folder should be allowed

A. INSTALLATION OF ADMINISTRATOR COMPONENTS USING STANDARD INSTALLATION PACKAGE

Administrator Components of the software should be installed on each computer that will be used to control other computers.

To install Administrator Component:

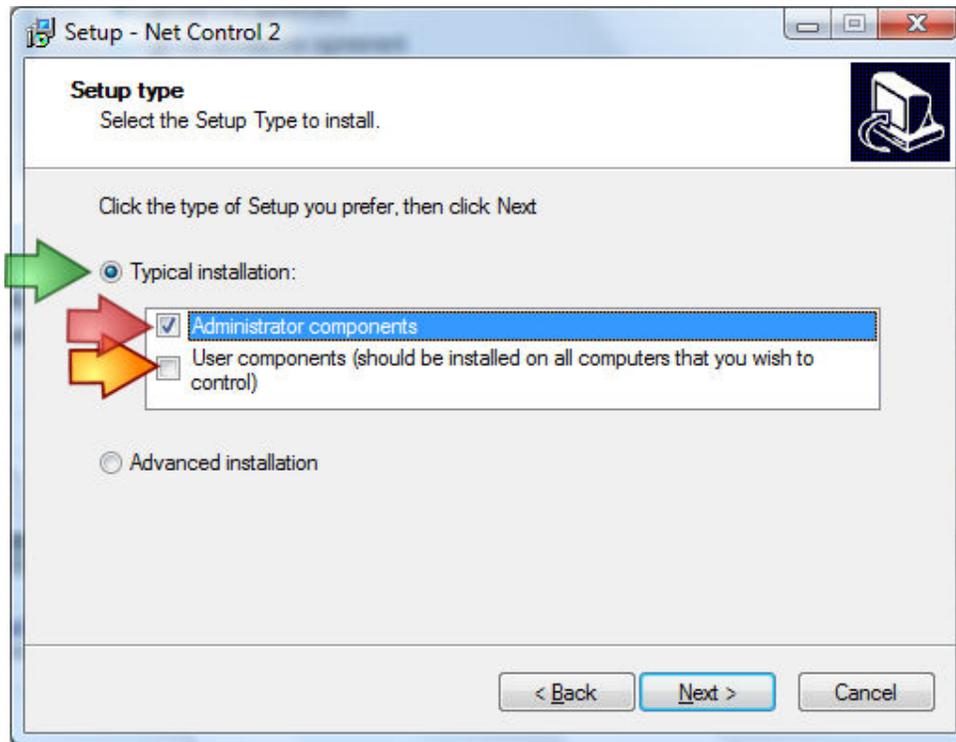
1. Run the Net Control 2 Installation Package (most often net900.exe or net900r.exe file).



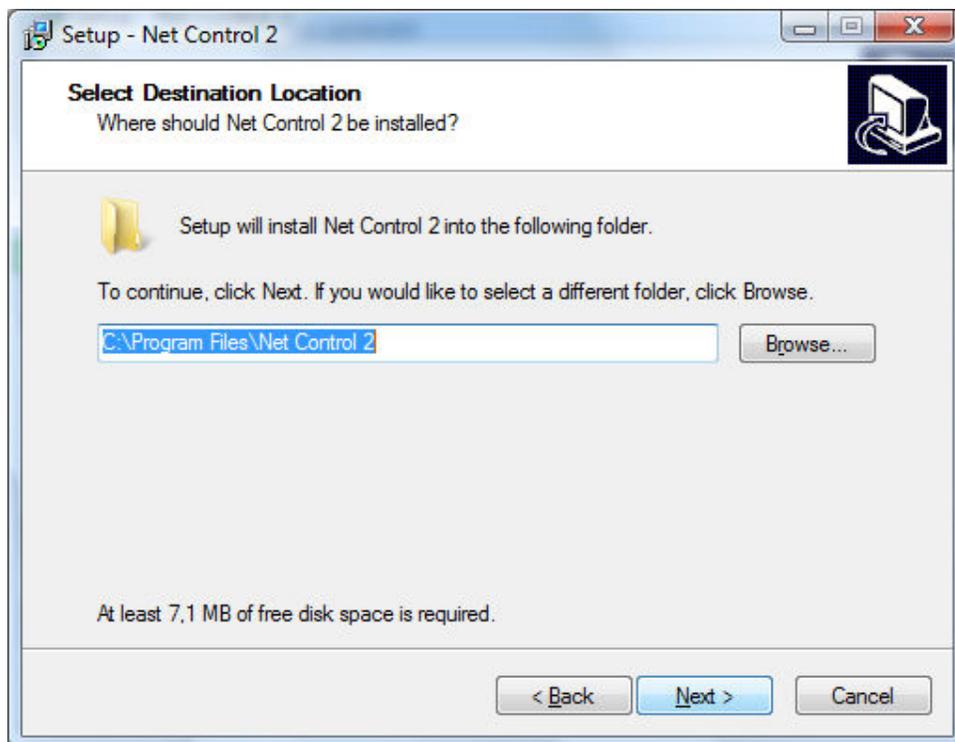
2. Read and accept the End-User License Agreement.



3. On the Setup Type page, select Typical Installation then Administrator Components. Deselect the User Components field if this computer should not be controlled remotely.

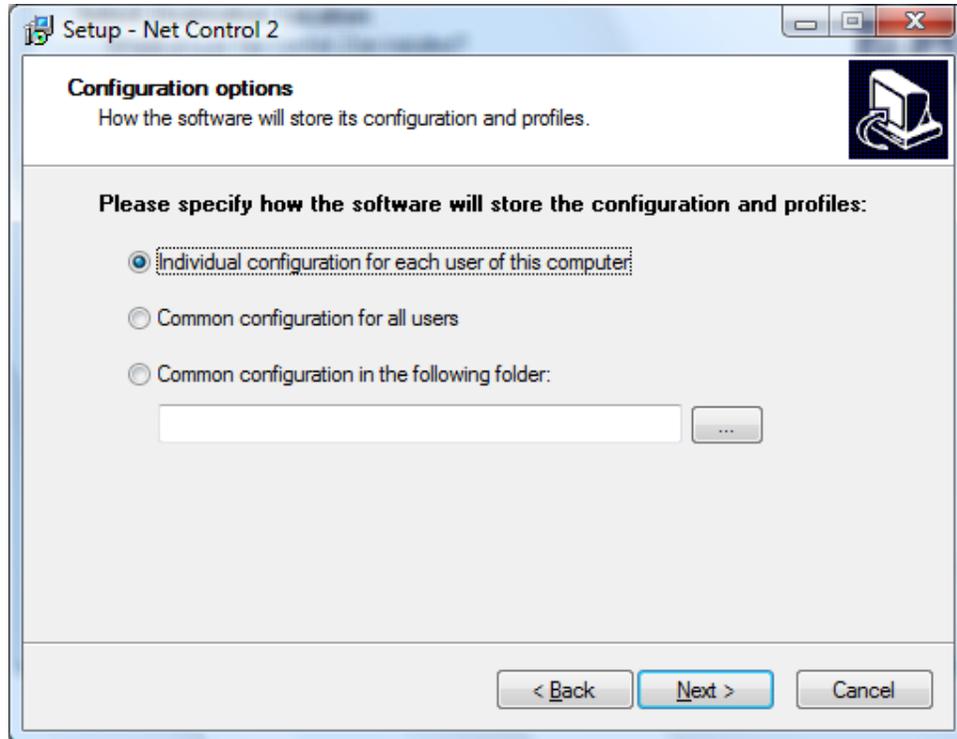


4. Select the folder and Start Menu folder (optional) where the Net Control 2 software will be installed.



5. If Administrator Components are selected, select how the configuration will be

stored:

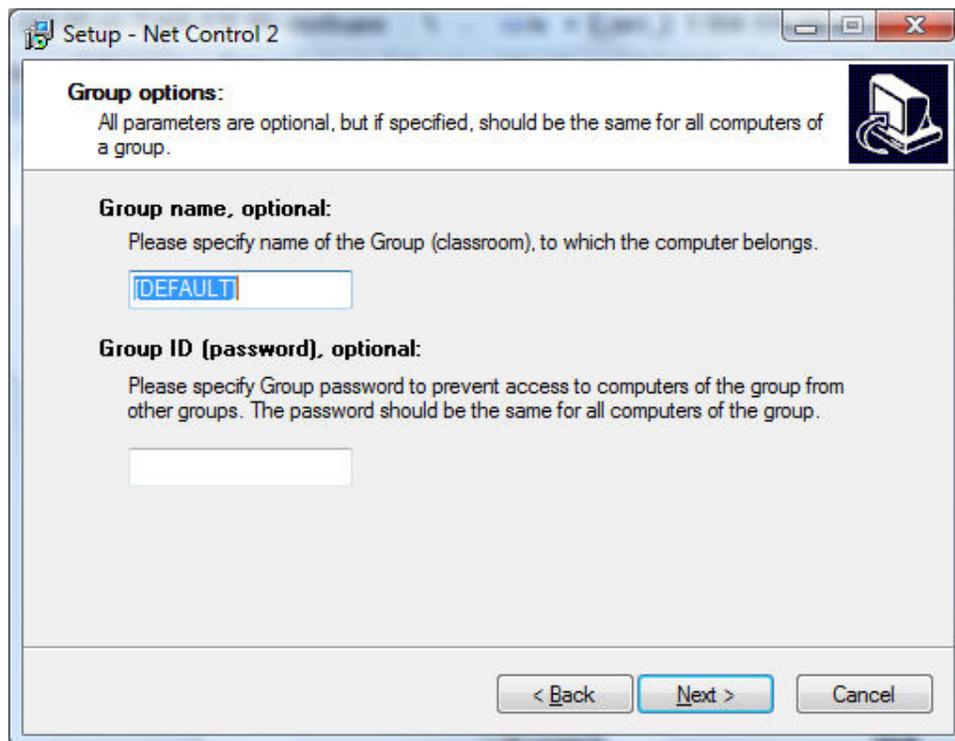


Individual configuration for each user of this computer - the workspace, profiles, settings and Net Control 2-related documents will be individual for every user of this computer and stored in personal folder of the user, for example:
"C:\Users\LOGINNAME\AppData\Roaming\Net Control 2" for Windows Vista/7/2008
"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 stored in a specified folder.

6. **Select Group options** (only if the software was not installed on this computer earlier)



Setting up any **group name**, excepting “[DEFAULT]”, will make this computer a part of the specified Net Control 2 group.

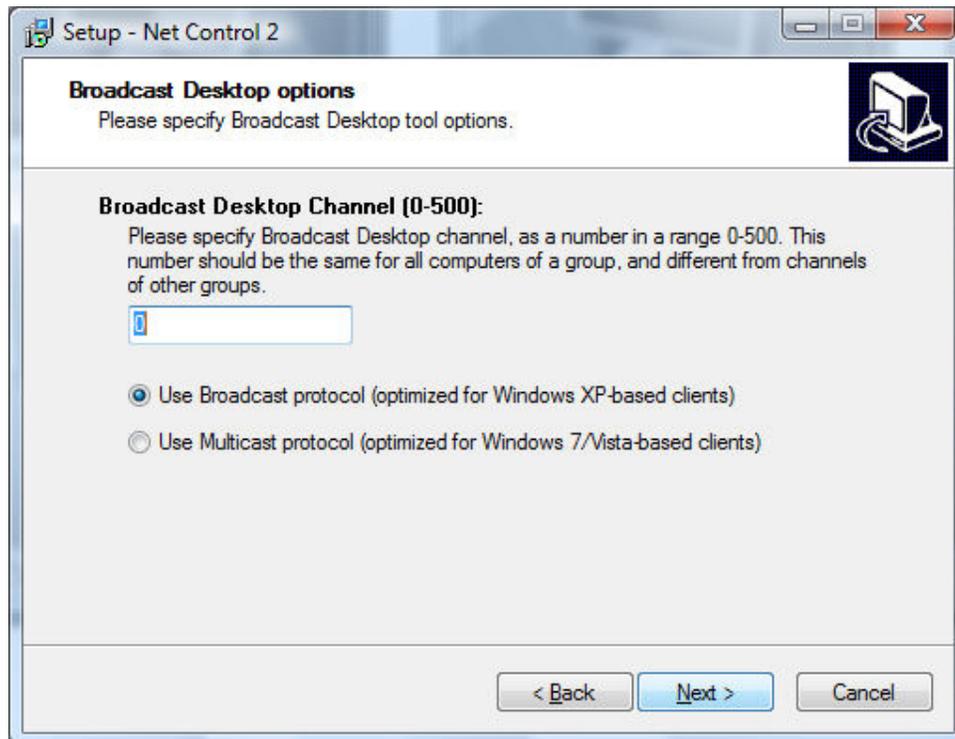
If you have several classrooms in the same network, we recommend placing all computers of one classroom to the one the same group. This will help to isolate computers of the group from other computers and groups. **Group name should be the same for all computers of the same classroom.**

You can leave this option empty or do not change it, if all computers will be listed in one group or the software will not be installed in other classrooms.

Optionally, together with Group name you can specify the **Group password**. Setting this option up may help prevent access to computers from other groups. The password must be the same for all computers of the same classroom.

Group options are allowed to set up only if the software was not installed earlier on this computer. If the software was already installed, Group options may be changed only using the software’s configuration. For more information about groups please refer to the Chapter I of this manual.

7. Select the default Broadcast Desktop options:



The **Broadcast Desktop Channel** number should be different for every lab of your network, otherwise the transmission sent in one classroom, will be “visible” in other classrooms.

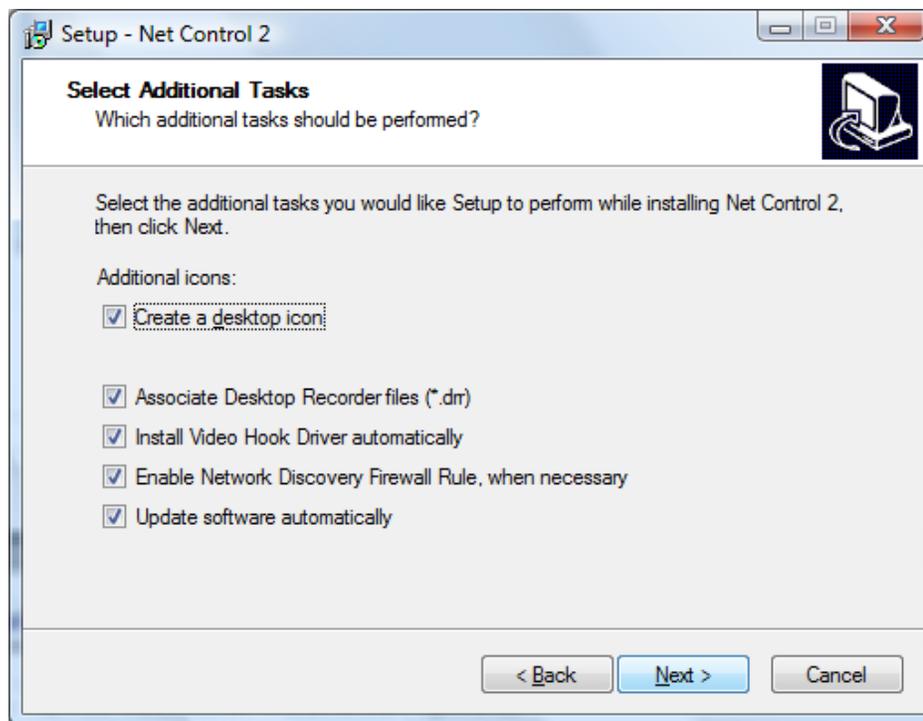
Select the transmission protocol for the Broadcast Desktop tool:

The **Broadcast** (UDP Broadcast) protocol is more commonly used in local networks and it is more effective on computers with Windows XP.

The **Multicast** protocol may work significantly better than the Broadcast protocol on computers with Windows Vista/2008 or 7, it has better resistance for transmission errors. But in several cases it may be unsupported by the network configuration or hardware.

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

8. Review and select the appropriate Additional installation options:



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, Administrator 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.

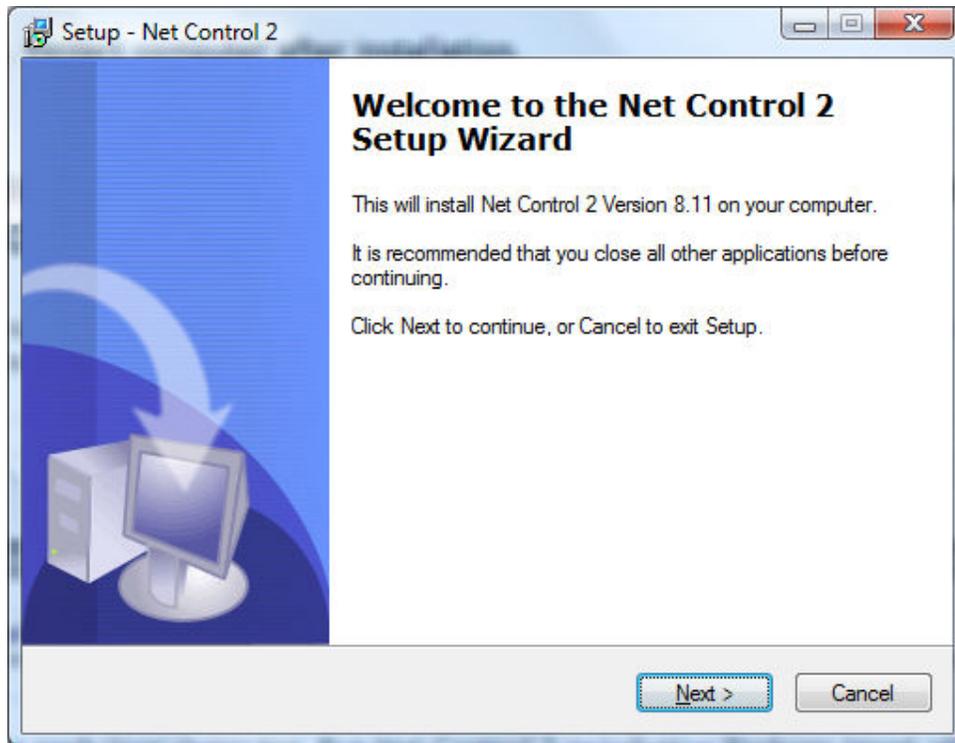
During the installation, Net Control 2 will automatically install the Video Hook Driver, which is a required component for Remote Desktop, Broadcast Desktop, and Desktop Recorder tools. During the driver setup, the screen may flicker several times.

6. Restart the computer after installation.

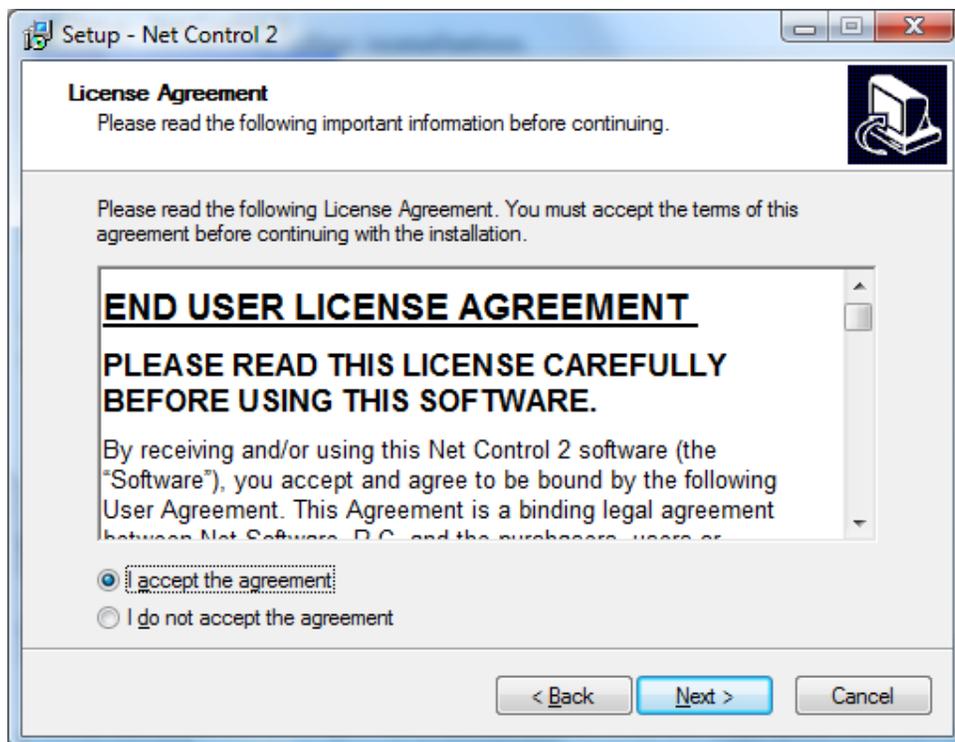
B. QUICK INSTALLATION OF USER COMPONENTS USING STANDARD INSTALLATION PACKAGE

User components of the software should be installed on each computer that will be controlled by Net Control 2 Administrator.

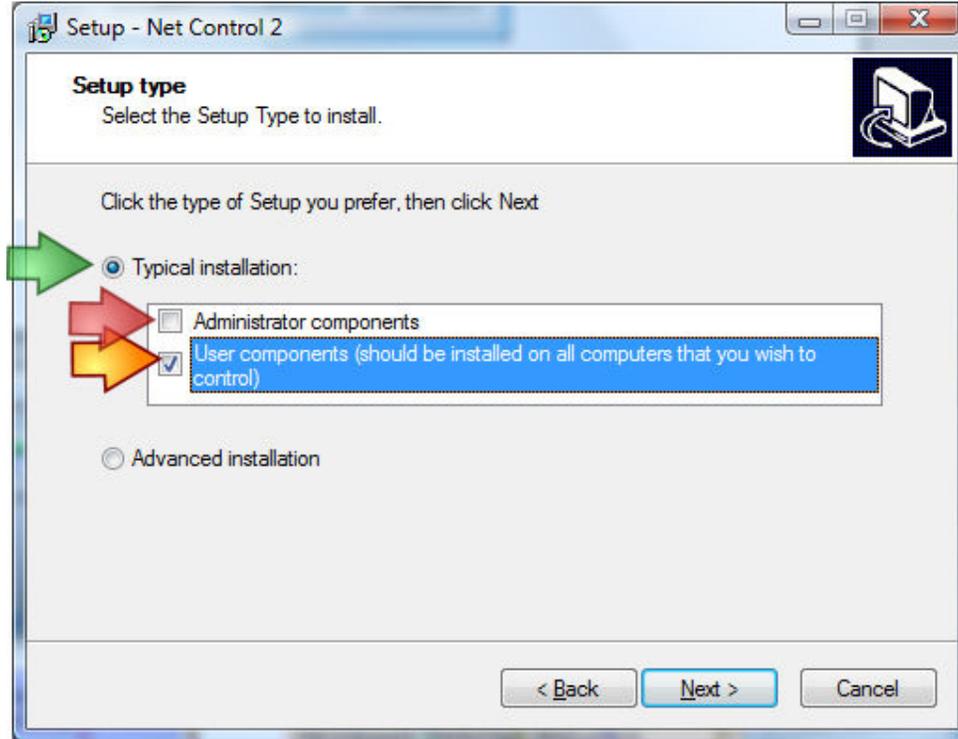
1. On each User computer, run Net Control 2 Installation Package (most often net900.exe or net900r.exe file).



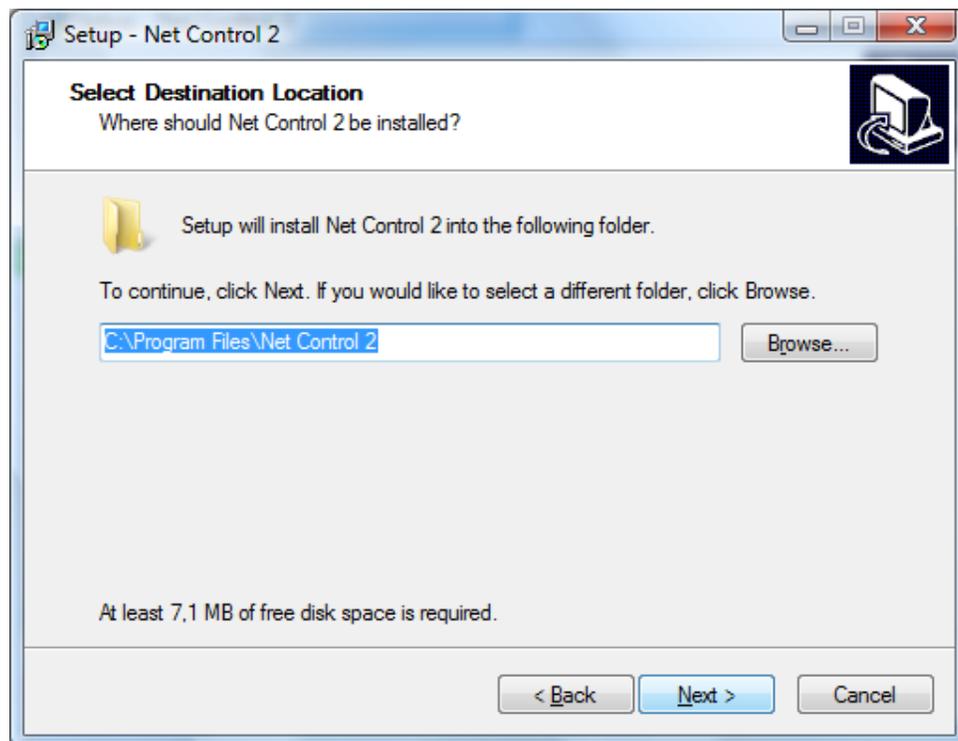
2. Read and accept the End-User License Agreement.



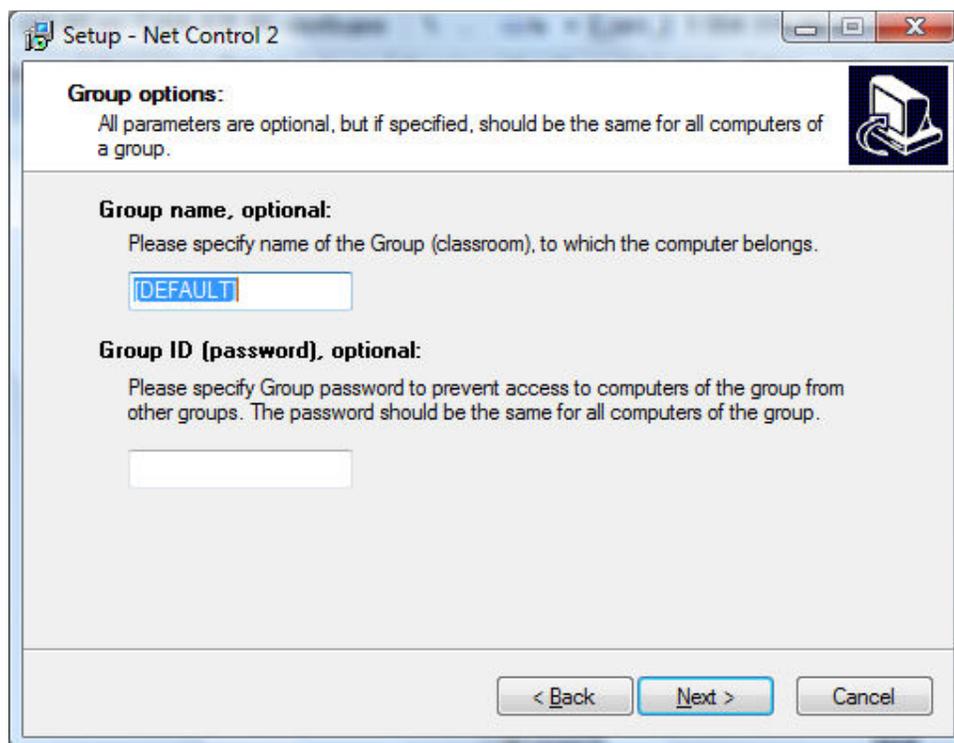
3. On the **Setup Type** page, select **Typical Installation** then **User Components**. Deselect the **Administrator Components** option if this computer will not control other computers.



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



5. **Select Group options** (only if the software was not installed on this computer earlier)



Setting up any **group name**, excepting “[DEFAULT]”, will make this computer a part of the specified Net Control 2 group.

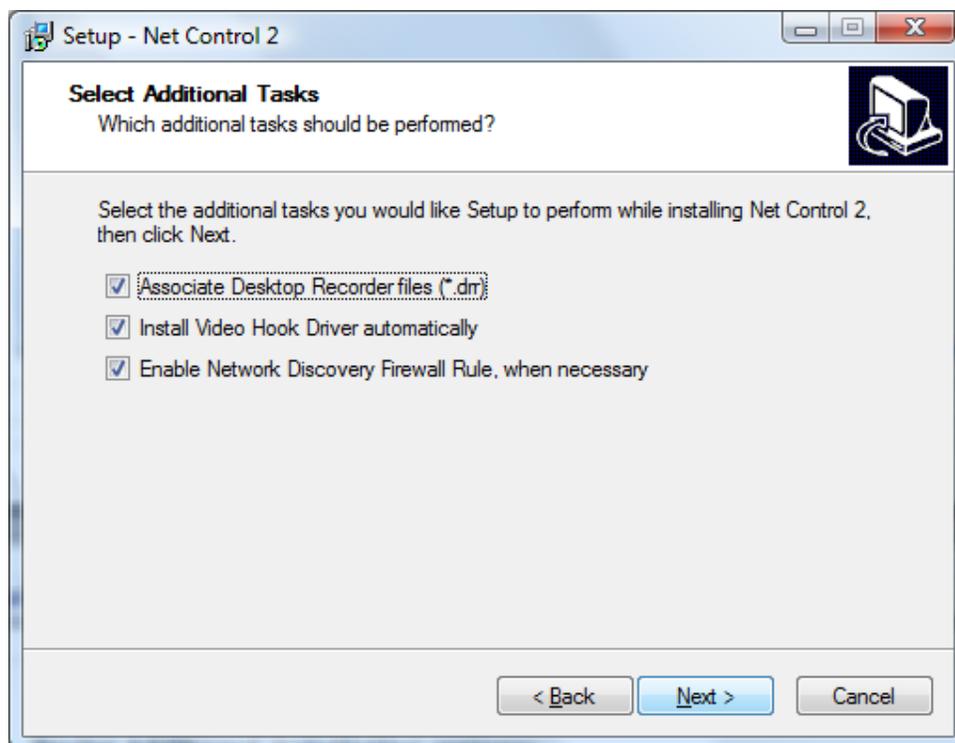
If you have several classrooms in the same network, we recommend placing all computers of one classroom to the one the same group. This will help to isolate computers of the group from other computers and groups. **Group name should be the same for all computers of the same classroom.**

You can leave this option empty or do not change it, if all computers will be listed in one group or the software will not be installed in other classrooms.

Optionally, together with Group name you can specify the **Group password**. Setting this option up may help prevent access to computers from other groups. The password must be the same for all computers of the same classroom.

Group options are allowed to set up only if the software was not installed earlier on this computer. If the software was already installed, Group options may be changed only using the software’s configuration. For more information about groups please refer to the Chapter I of this manual.

5. Review and select the appropriate Additional installation options.



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.

7. Restart the computer.

C. ADVANCED INSTALLATION OF USER COMPONENTS USING STANDARD INSTALLATION PACKAGE. ROLES.

Net Control 2 User Modules supports several special modes, which may be used in special cases and configurations.

User-Connect Mode (Wi-Fi/MultiVLAN) - this is useful option when a network where the software will be installed consists of **several virtual networks (VLANs)** or subnetworks. In this case, network hardware may block information sent from the Administrator module in “broadcast” mode (*to all recipients in the network*); therefore, several features like *Search Computers*, *Broadcast Desktop*, and *Speech*, will not be available outside of the network segment where the sender of information is located. To help Net Control 2 Administrator find and connect User computers outside the current VLAN, you can enable *MultiVLAN Mode* for the User Module.

In *MultiVLAN mode*, the User Module will automatically connect one or several Administrator computers and will add its shortcut to the Administrator's workspace. In addition, it will remove this shortcut from the workspace once connection is closed. The Administrator does not need to scan the network for connections, form workspace, etc.

as everything will be done automatically.

Student Registration - this mode is useful in situations when students use notebooks/laptops and move from one classroom to another making it is impossible to create static list of computers on the Administrator side.

When Student Registration mode is enabled, the software will display the Student Registration window at the Windows startup and the User should select one “classroom” from the list of available classrooms in the network.

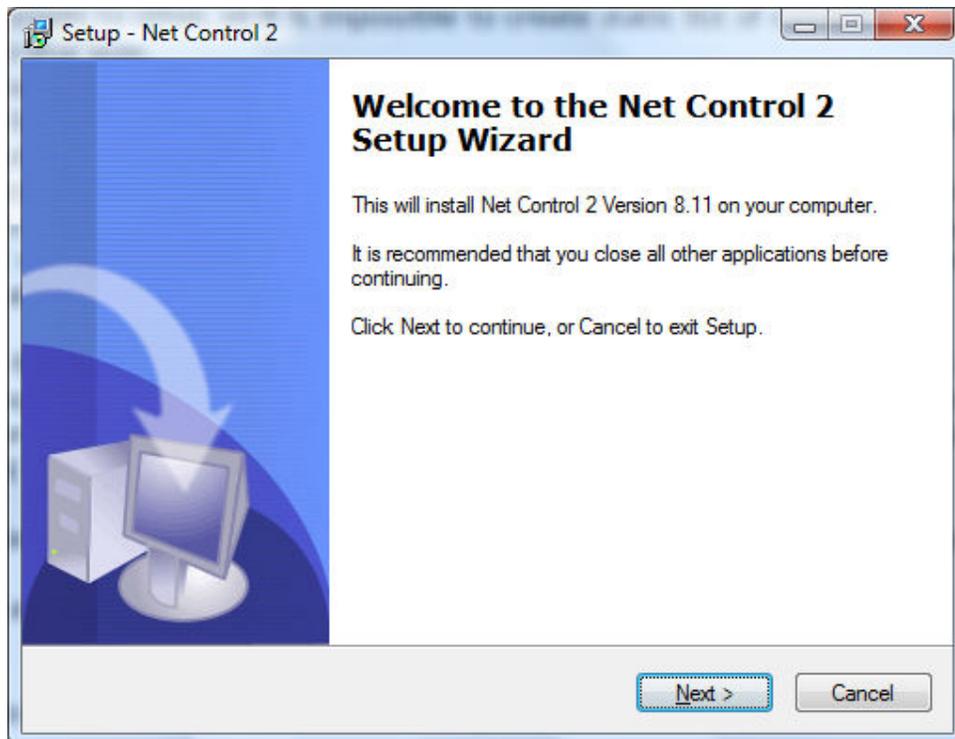
Being registered at a “classroom”, The User module will try to connect to corresponding Administrator computer(s) and will add their new connection (shortcut) for this computer.

The shortcut will be automatically removed once the user turns his/her computer off or registers at another classroom.

Terminal Server Sessions support mode - you can use this mode if this computer is used as Terminal Server and users may use this computer remotely via thin client software or Windows Remote Desktop sessions. This mode should be enabled only if you need to control Terminal Server sessions.

To enable one of the specified above modes, you need to use advanced installation:

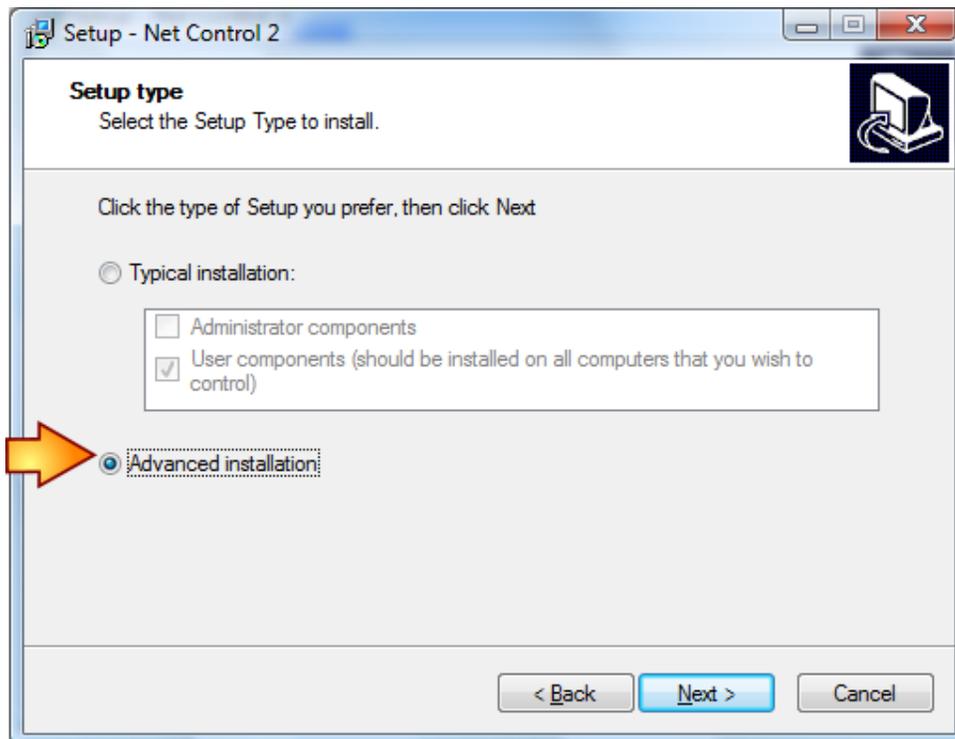
1. Run the Net Control 2 Installation package.



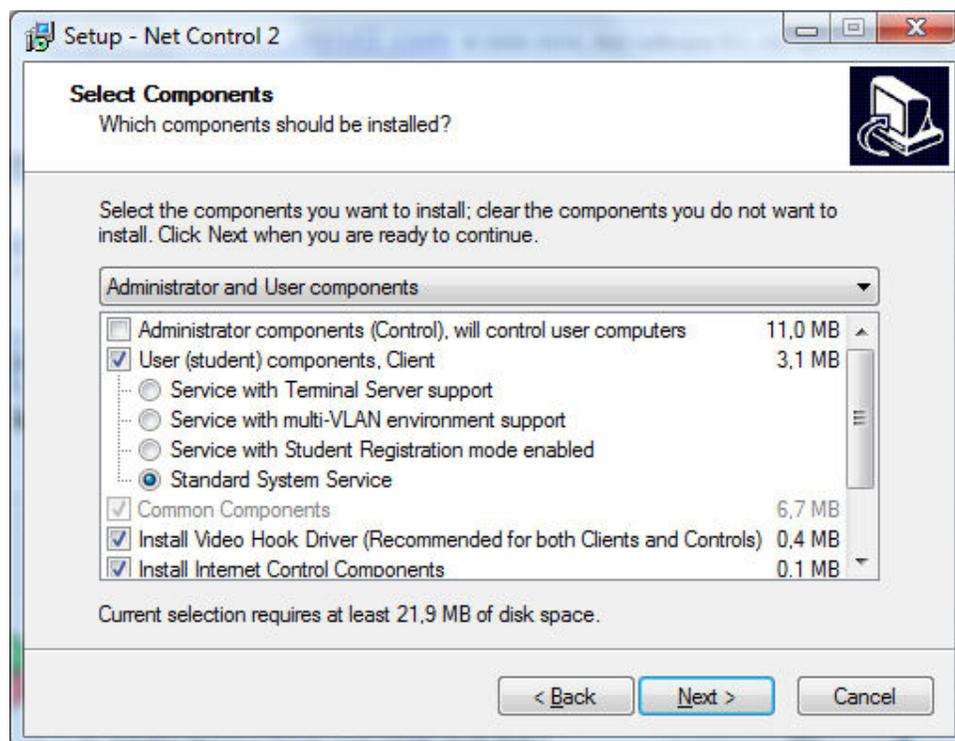
2. Read and accept the End-User License Agreement.



3. Select Advanced Installation.



4. On the Select Components page:



Select the “**Service with Terminal Server support**” mode if the computer will be used in Terminal Server sessions support mode. After installation this mode may be enabled or disabled in the Client Configuration window; the Connection Mode tab. For more information please refer to the Chapter R of this document.

Service with MultiVLAN environment support option - enable this option to install the software in User-Connect mode for multi-VLAN network environment.

Service with Student Registration mode enabled - use this option to install the software in *Student Registration* mode.

Standard System Service - the default mode for user components installation.

5. Restart the computer after the installation.

D. INSTALLATION OF USER COMPONENTS USING ACTIVE DIRECTORY/GROUP POLICIES AND MSI PACKAGE.

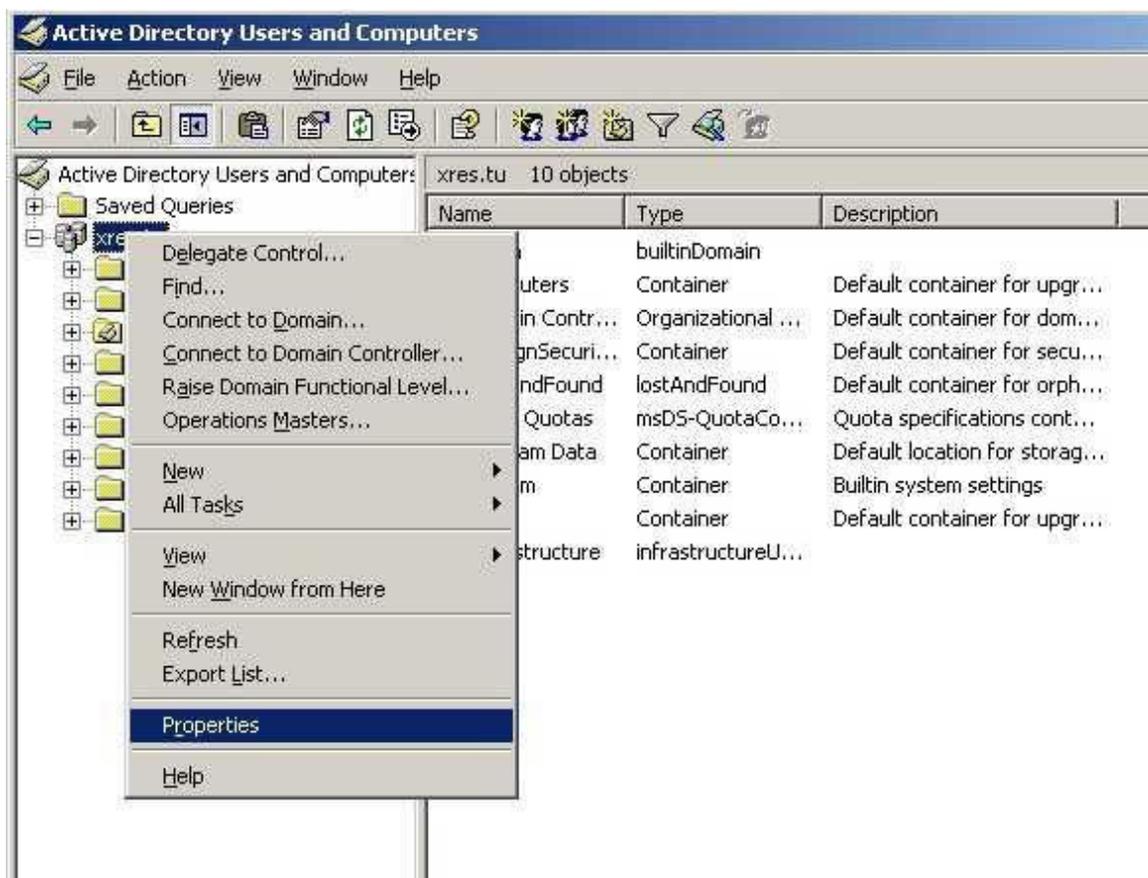
Requirements: Network with domain, Windows Server 2003 or 2008, Active Directory services enabled, and administrative privileges.

The Special MSI package described below is available for free-of-charge for registered, educational or commercial customers by request. This package is intended for the installation of the User Component only, in default configuration and without any additional modification or configuration.

If you need to install the MSI package with some pre-defined settings, for example a Group Name, passwords etc., you can request us for special MSI Builder tool for building custom MSI package for client components deployment. This package is available for free of charge for registered or educational customers by request.

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. For Windows Server 2003, click **Start -> Programs -> Administrative Tools -> Active Directory Users and Computers**.
3. On the left pane, browse and select the domain where you wish to deploy the package. Right click and select **Properties**:

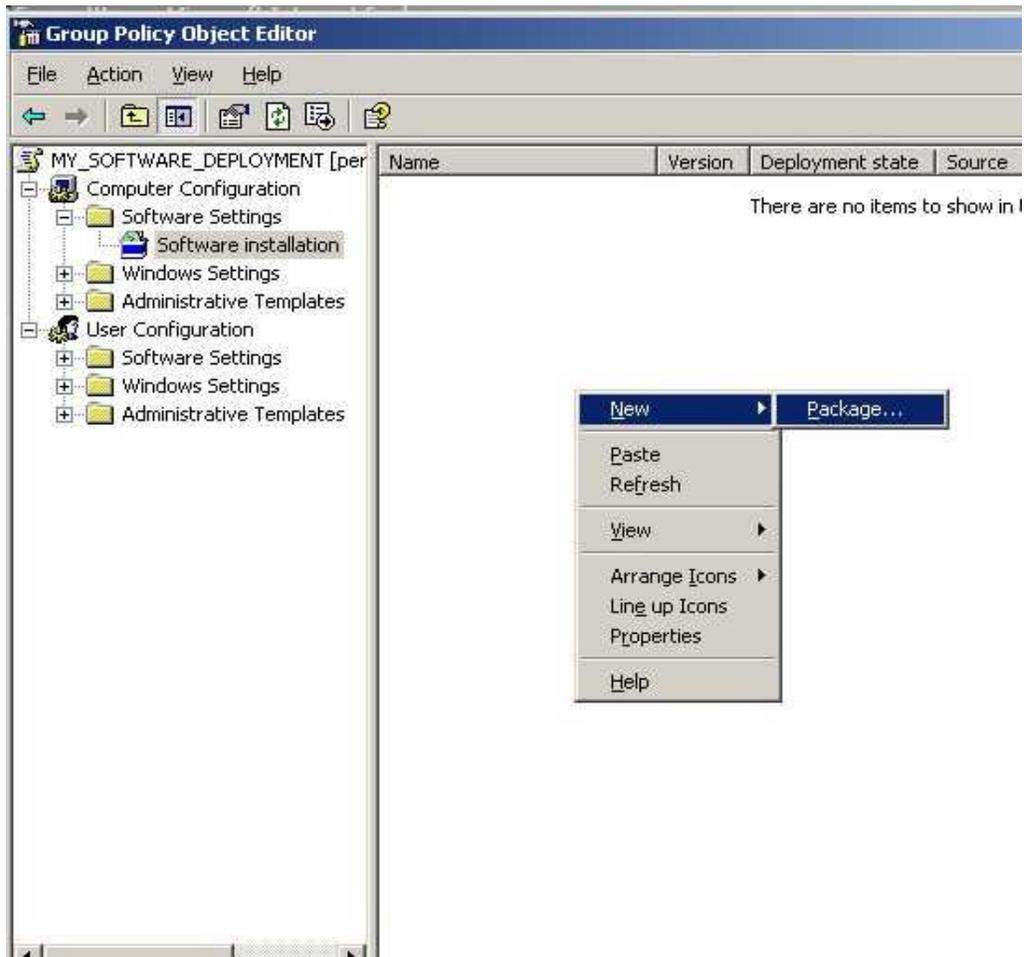


4. In the Domain properties window, switch to the **Group Policy** tab, click the **"New"** button, specify a name for the policy, and then click the **"Edit"** button:



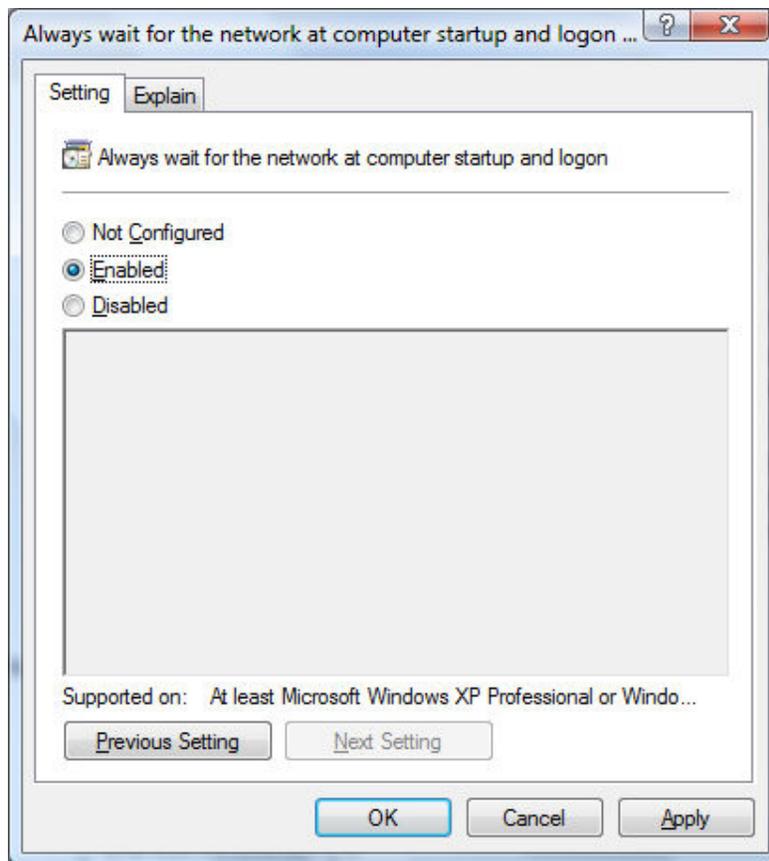
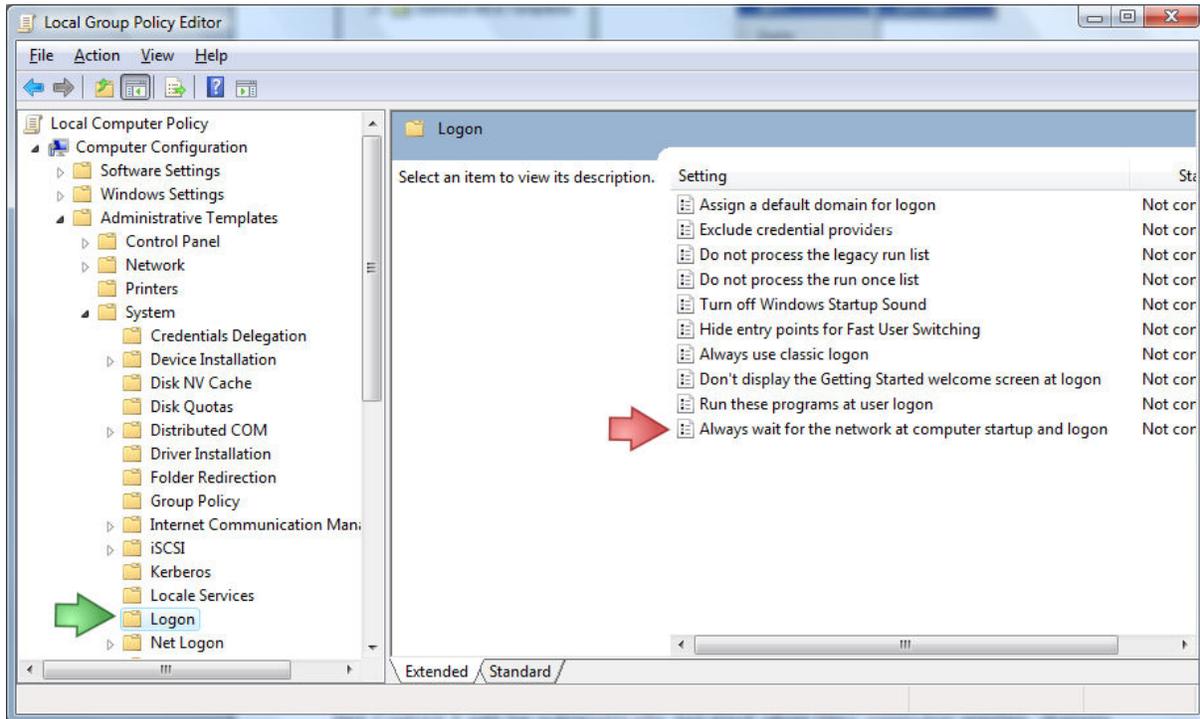
5. In the **Group Policy** window, expand the left tree: **Computer Configuration** -> **Software Settings** -> **Software Installation**. Right click within right pane area, and click menu command **New** -> **Package** from the context menu.

6. Browse for the network path to the Net Control 2 Server MSI package, choose "Assigned" and click OK. (Please note: You need to specify the network path to the package in this format - `\\SERVER\SHARED_RESOURCE_NAME\PATH\msi`. This path should be valid and accessible for all user computers where the software will



be installed).

7. If Windows XP or later is installed on user computers, please enable "Always wait for the network at computer startup and logon" policy in the same Group Policy. Open Computer Configuration -> Administrative Templates -> System -> Logon -> Always wait for network at computer startup and logon policy; enable it.



8. Close Group Policies and restart the 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, 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.

E. SCRIPT INSTALLATION WITH STANDARD INSTALLATION PACKAGE.

To install the software using standard Net Control 2 Setup installation package in automatic execution mode and without manual configuration, you can run it with the following parameters:

/SILENT - run installer in non-interactive mode without additional prompts

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

adm - Administrator Component

user\serv - User 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 as Protocol Layer Mode

lspm\ho - Install Internet Control Engine as Internet Explorer Plug-in (recommended)

chats - External chat, cam recorder/cam player

/NORESTART - Do not restart computer automatically after installation

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

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

/GROUPID:Password - (optional) - specifies Group ID (password) for this computer. Used only if the software was not earlier installed on this computer.

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

```
D:\Downloads\net800r.exe /SILENT /COMPONENTS="user\serv comm drv lspm\ho chats" /NORESTART
```

<H:\C:\Program>

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

```
D:\Downloads\net800r.exe /SILENT /COMPONENTS="adm comm drv chats" /NORESTART
```

[H:\C:\Program](#)

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

F. INSTALLATION USER COMPONENTS OF THE SOFTWARE 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 Administrative Share (Remote Admin) resource should not be disabled;
- Net Control 2 software is already installed on the Administrator computer;

The Remote Admin resource.

Remote installation of Net Control 2 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 Client computer run Command Prompt (press Win+R on a 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 XP Professional:

in Local Security Policy (Windows' Start button -> Administrative Tools -> Local Security Policy) select Security Settings -> Local Policies -> Security Options. At right pane select "Network access: sharing and security model for local accounts" policy, set this policy to "Classic - local users authenticate as themselves"

Windows XP Professional SP3:

- Open Explorer and select Tools -> Folder Options
- Select the View tab and scroll all the way down to the bottom of Advanced Settings
- Make sure that "Use simple file sharing (Recommended)" is not selected

Windows Vista and 7:

Add the following setting to the system registry of every client computer:

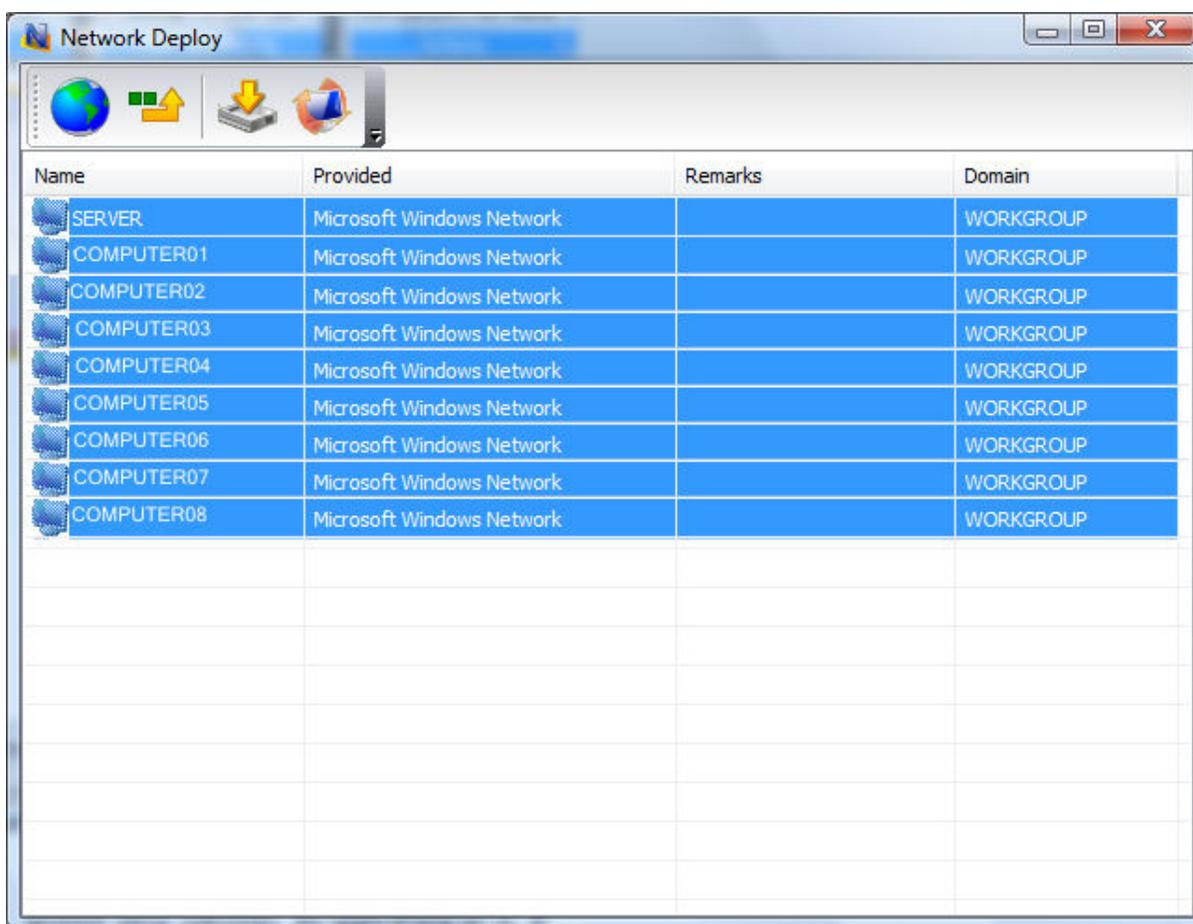
Key: HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\Policies\System

Value: LocalAccountTokenFilterPolicy :**DWORD** = 1

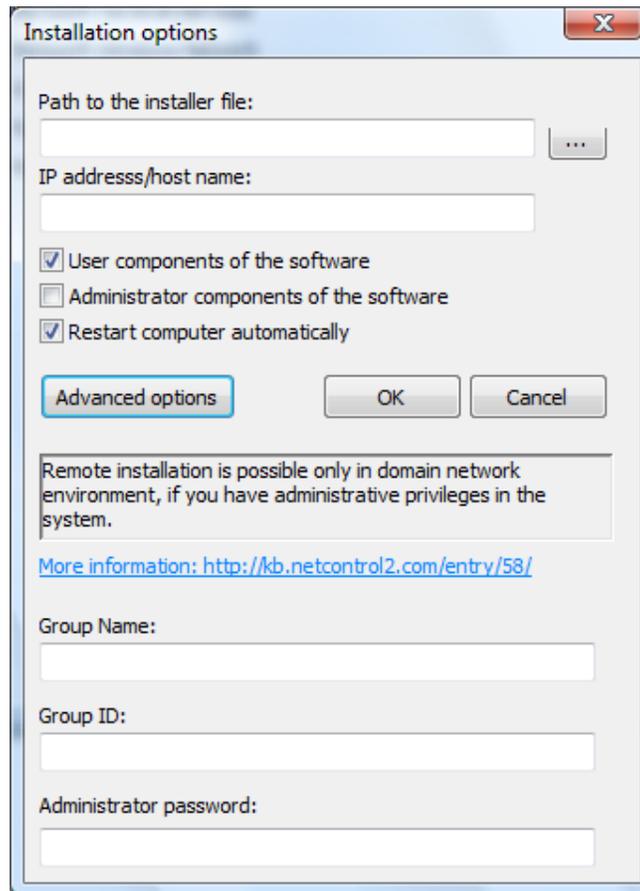
To apply changes after altering this setting you need to restart the client computer.

To install the software:

1. Run Net Control 2 Administrator;
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 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:

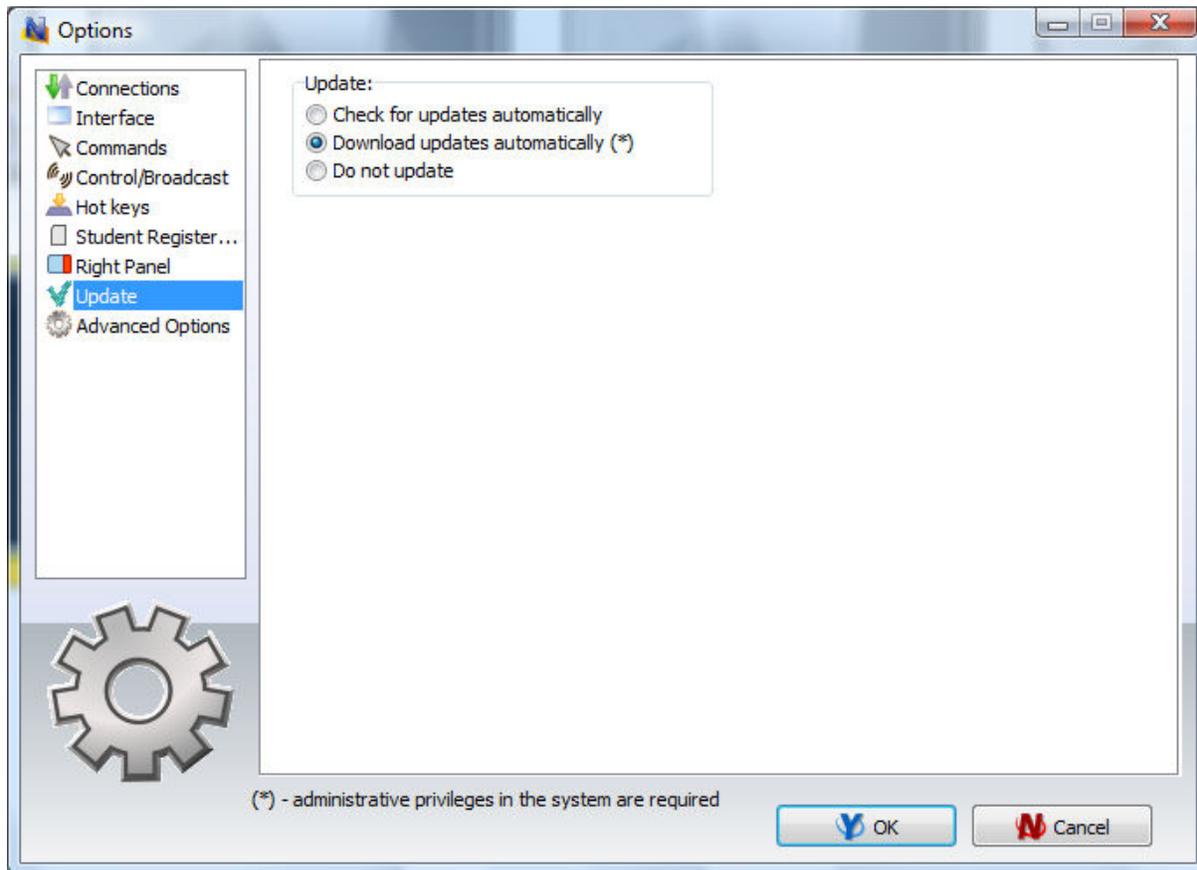
- Your network does not have domain
- You do not have local administrative privileges on remote computer
- Provided login name and password of administrator is incorrect

G. UPDATE.

G.1. Automatic update.

Since version 8.11, Net Control 2 has built-in automatic update tool:

- If the Administrator computer is connected to Internet
- If Automatic Update is enabled in the NC2 Main menu
N -> Options -> Control Options, Update page, Download Updates Automatically option is enabled



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 administrator computer and will deploy it to the user computers as soon as they are connected to the administrator 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

G.2. Manual update using standard installation package.

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

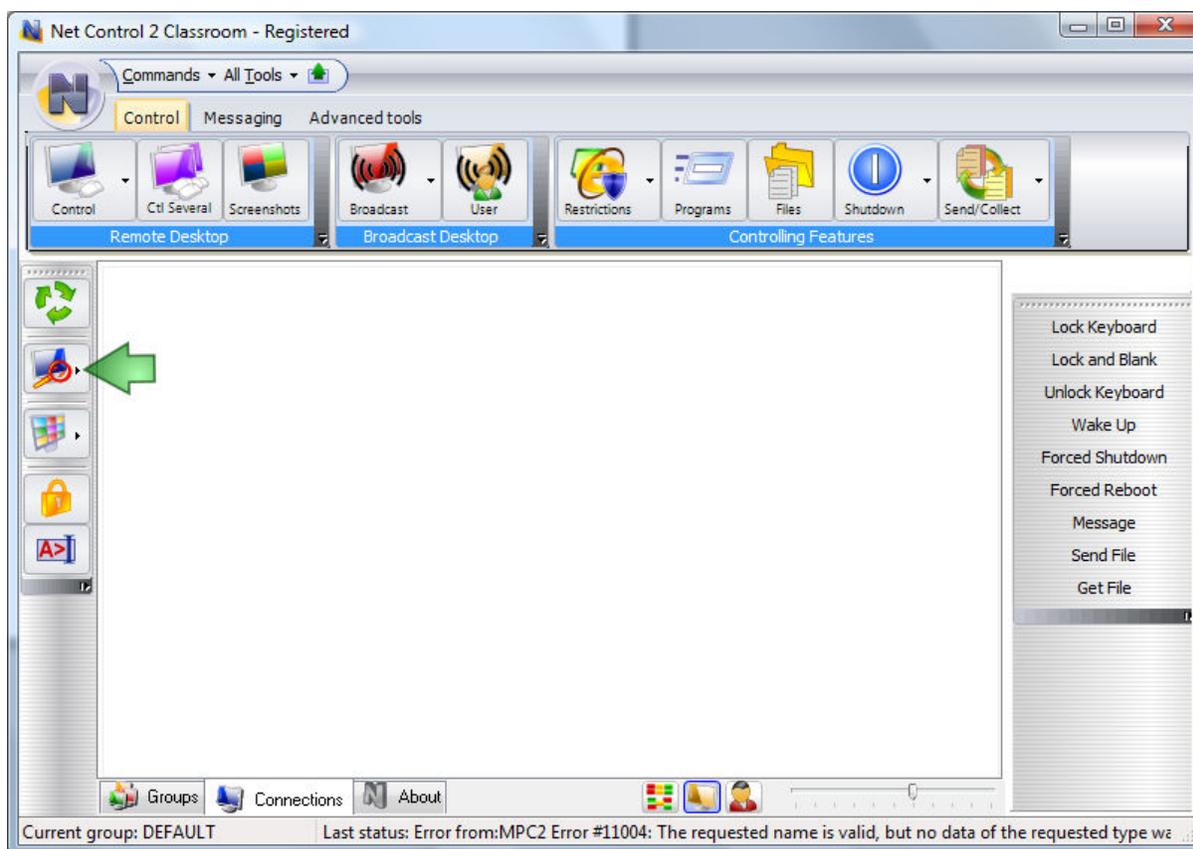
G.3. Update with MSI package.

If the software was installed earlier via **Active Directory/Group Policies** and MSI package, you can update it, removing the older package from Group Policies, and installing the new package. Please see chapter D of this manual.

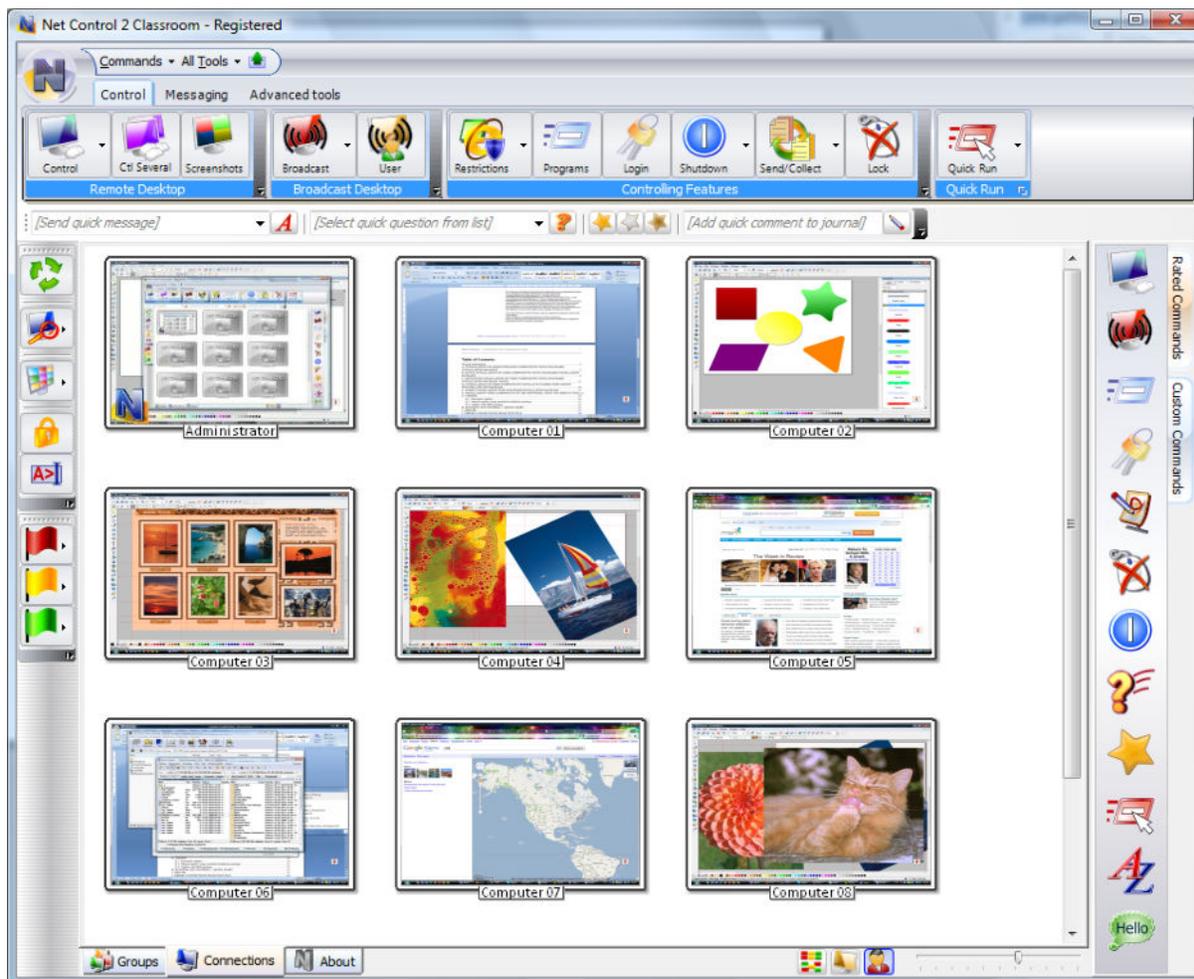
H. RUNNING NET CONTROL 2. QUICK START.

When the software is installed on the Administrator and User computers, you can scan the network for available computers, create a workspace and start managing computers remotely:

1. Run Net Control 2 Administrator
2. If the User Module was installed in typical installation mode (Quick installation):
 1. Scan network for available connections, clicking Scan Network For Available Connections button on left toolbar:



If the User Component is installed on the user computers, Net Control 2 will find new connections and add them to the workspace:

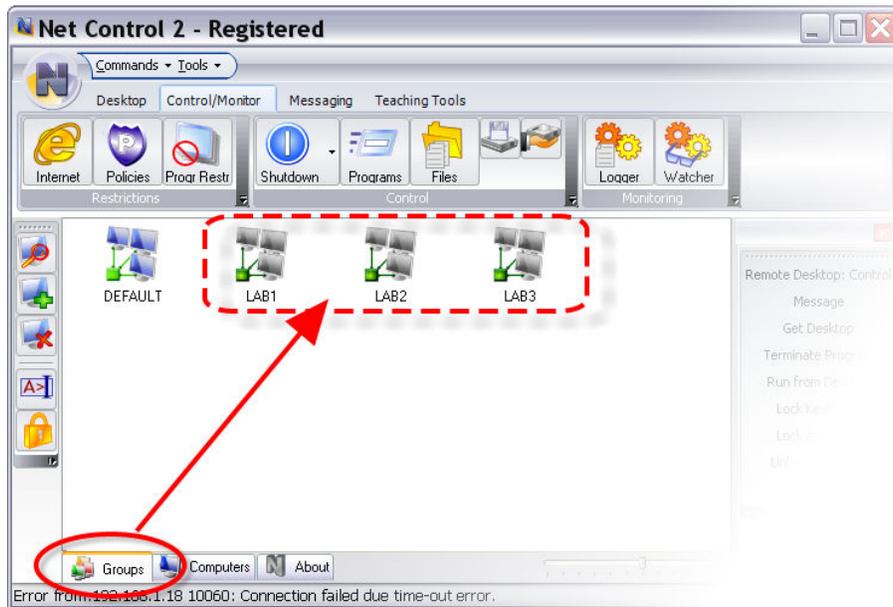
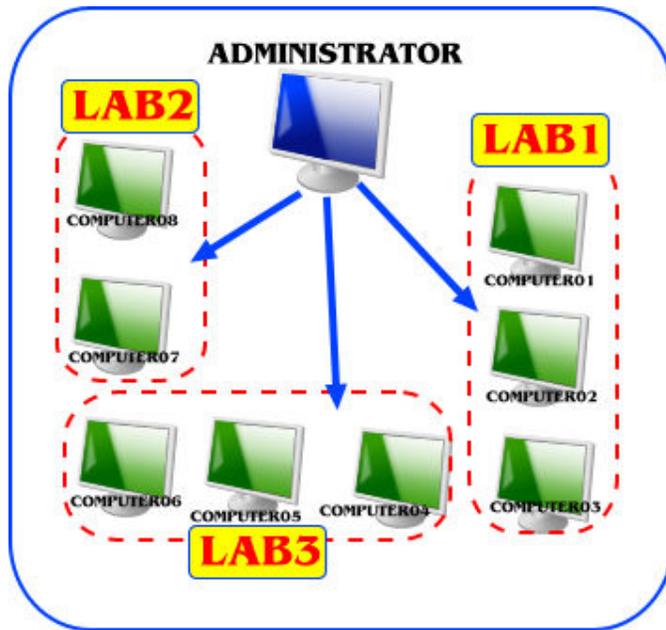


If the User Module was installed in “Wi-Fi/MultiVLAN Mode” as specified in Chapter C (*Advanced Installation of User Component*), you don't need to scan the network for available connections. The User computer will connect to the Administrator computer automatically within **15-30 seconds** and add its shortcut to the workspace.

To control User Computers, select them in the list and apply a command from the Top toolbar, Right Panel, All Tools or Commands menu.

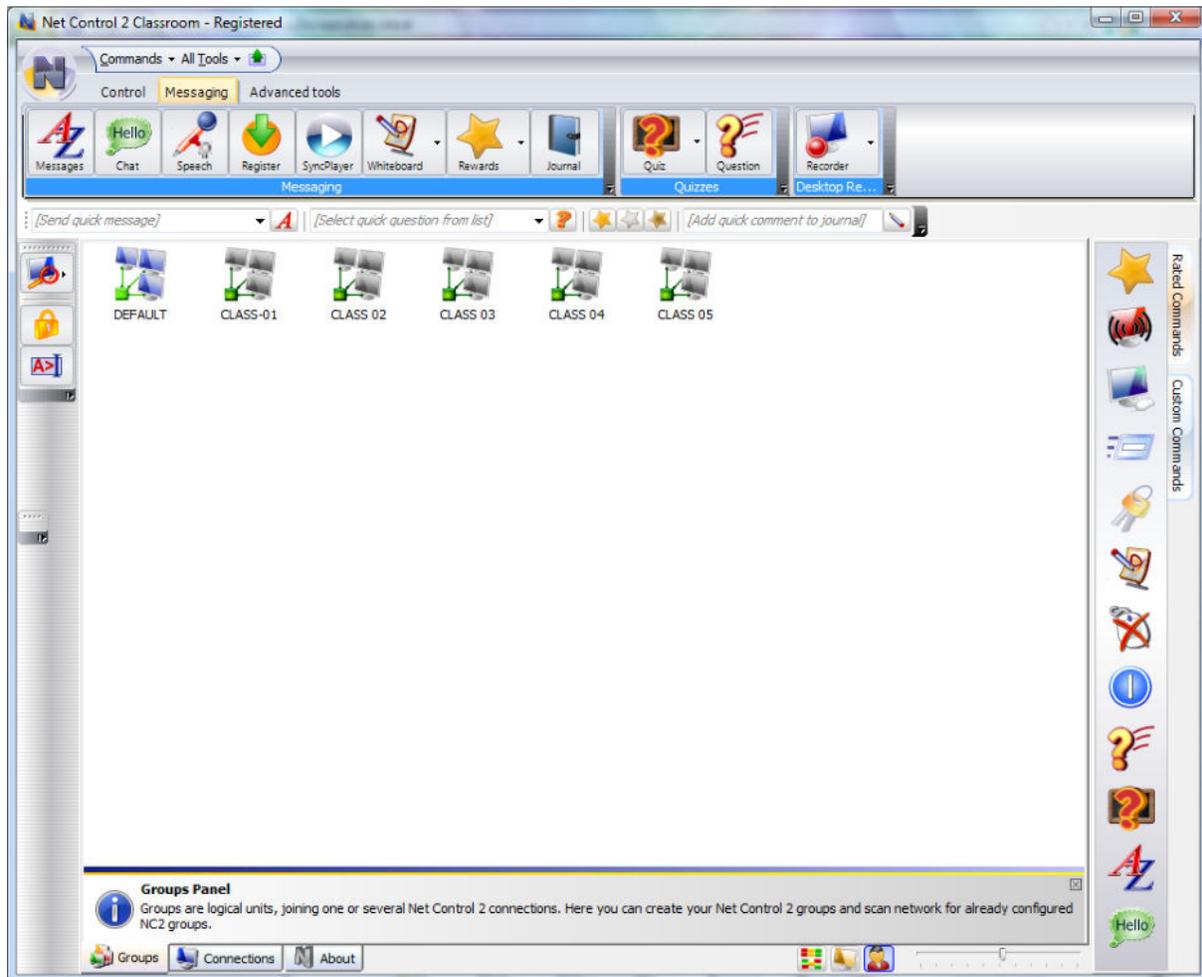
I. GROUPS

I.1. Each User computer in Net Control 2 is a member of at least one group. When it is not assigned, the computer belongs to group “DEFAULT”. You can assign a computer to any other group in settings of Net Control 2 User Component.



1.2. Scanning the network for available connections, *Net Control 2 will find and add to the workspace only those computers that belong to the currently selected group.*

To perform a full scan of your network for groups and computers, use menu command N -> Connections -> Search within Groups.

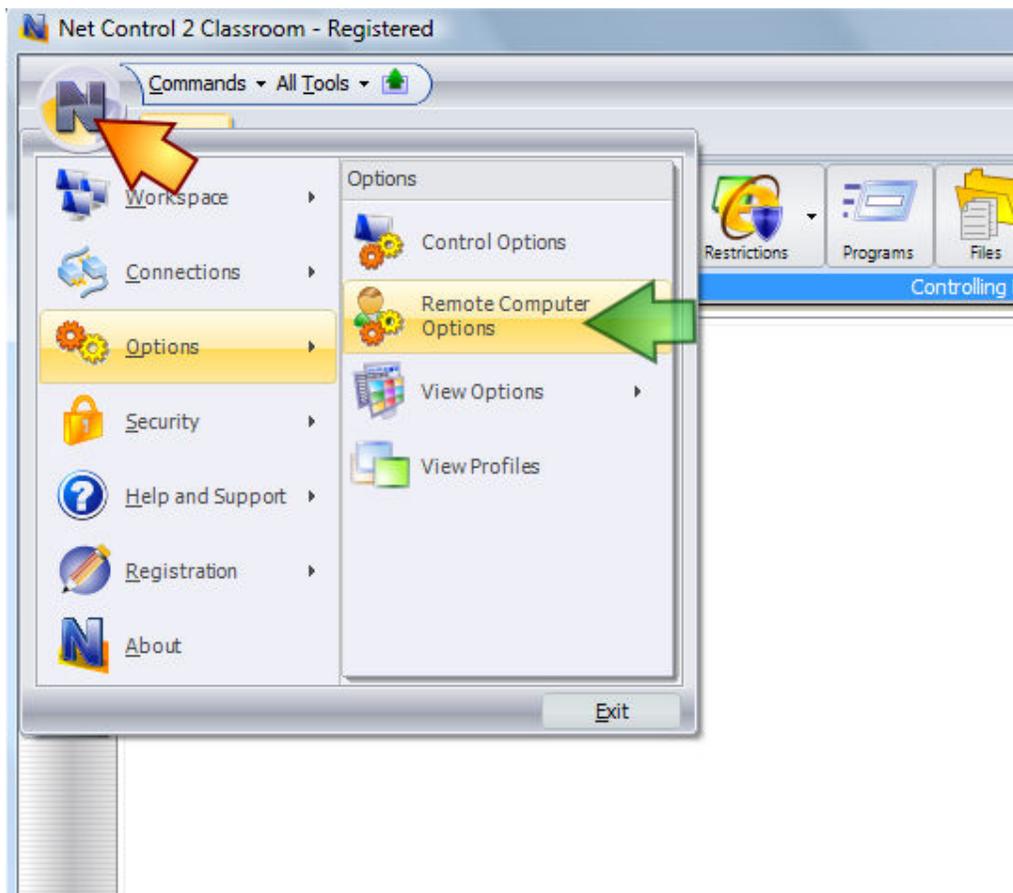


I.3. To select the other Group, click on the **Groups** tab at the bottom of the Net Control 2 window and double click the group.

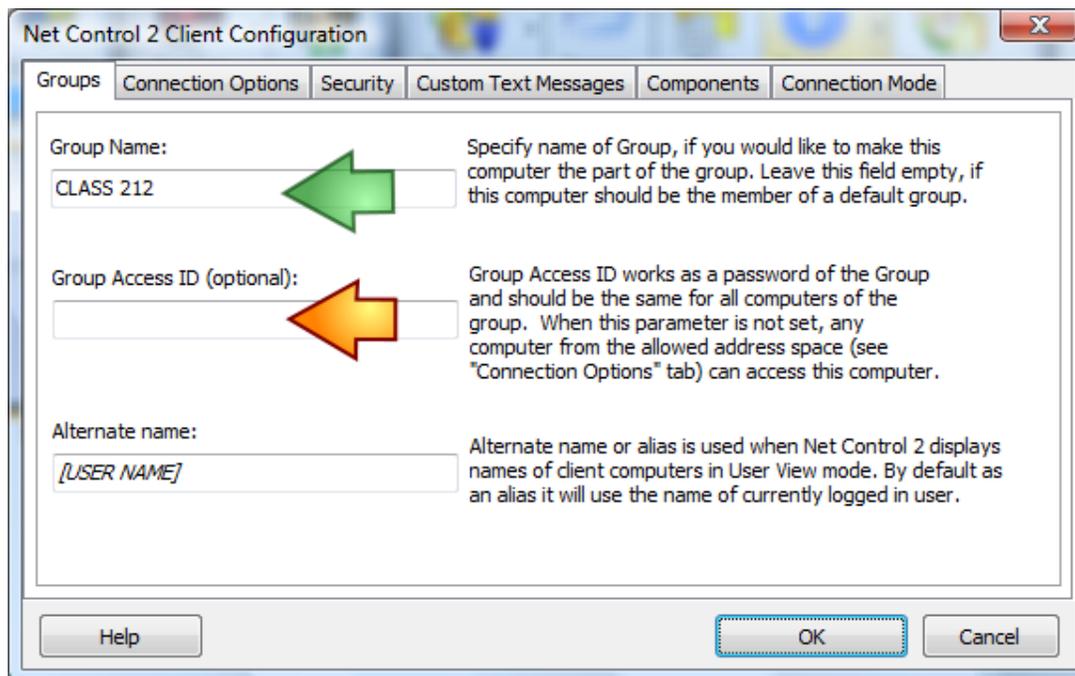
I.4. Each Group may be protected with its own password (**Group ID**). When the Group ID is assigned, Net Control 2 will require it in the Administrator Module in order to obtain access to the computers of the Group.

I.5. To assign or change the Group of user computers:

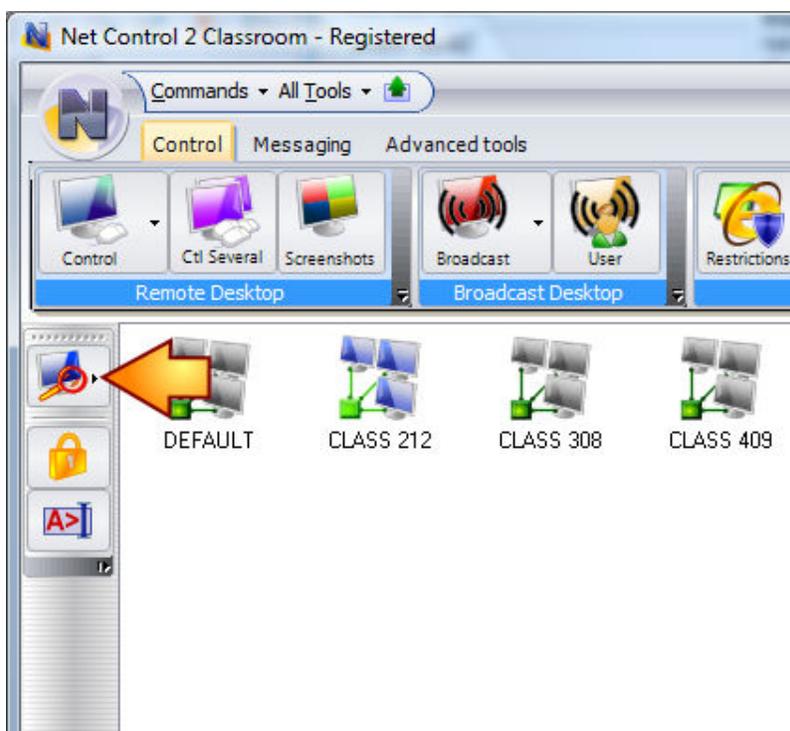
1. Select computers in the list of connections
2. Click menu command **N -> Options -> Remote Computer Options**



3. In the Configuration window, on the **Groups** tab, specify a new **Group name** and **Group ID** (optional). Do not assign a Group ID unless you need to protect access to the group with a password. Group ID should be the same for all computers of a group. Group Name is not case-sensitive.



4. Click the OK button.
5. Open the **Groups** tab.



6. Scan the network for new groups.
7. Open the group that was found and double click its icon.

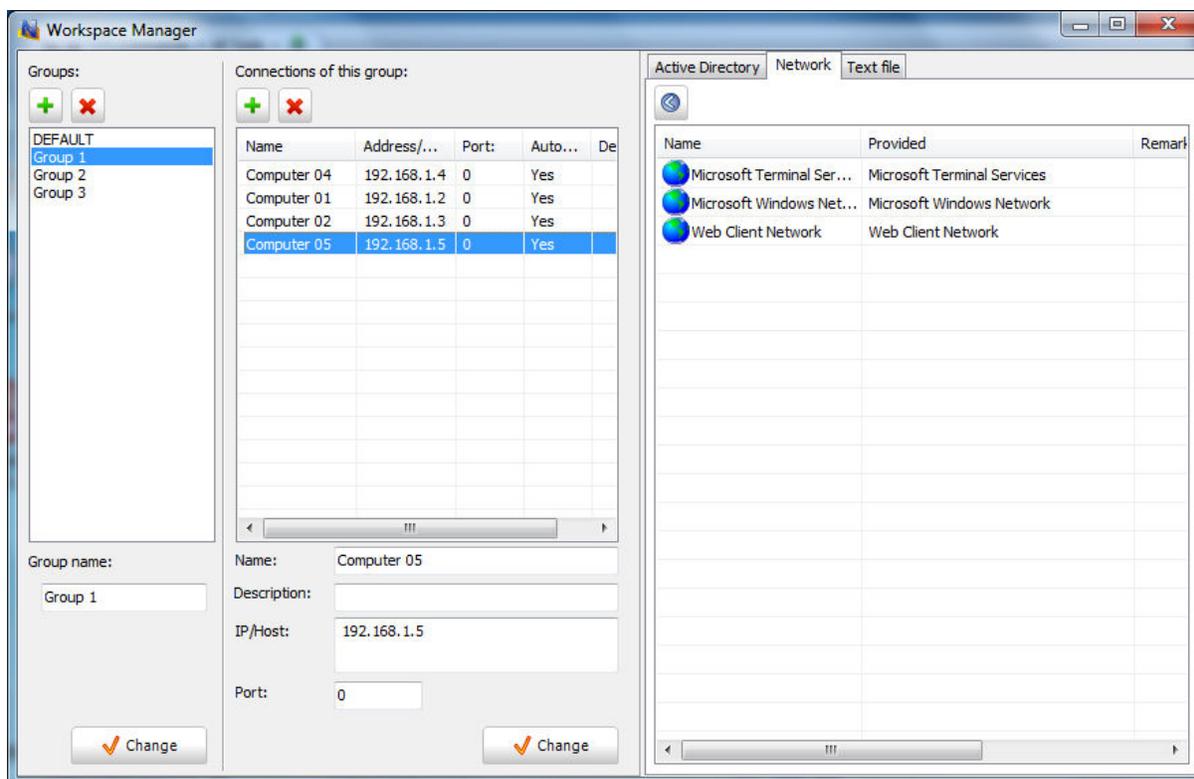
- To scan for new connections again within this group, click **Scan Network for Available Connections** button on the *left toolbar*.

1.6. To delete the **Group** from the list of Groups, select it and press the **Delete** key on the keyboard.

J. WORKSPACE MANAGER

The *Workspace Manager* is a special tool, which was designed for easy management of Net Control 2 workspace (list of groups and connections). Using the Workspace Manager you can create new groups and connections, modify them, import connections from the Active Directory, the Network Neighborhood or text files; move connections from one group to other.

To open the Workspace Manager, click the **"Workspace"** button on the Advanced Tools tab of the Top toolbar.



In the **"Groups"** list are specified groups of the current workspace. **To add a new group**, click "+" button; **to delete a group**, select it in the list and click "X" button.

To change name of a group in the workspace, select it and specify new name in the **Group Name** field. Click the **Change** button to apply changes. This operation will NOT change settings of client computers, and the group name will be changed only in the workspace of current computer.

To view or manage connections of a group, select the group in the "Groups" list. The "Connections of this group" list will contain connections of the selected group.

In this list, **to add a new connection**, click "+" button, specify new connection parameters at the bottom of the connections list and click "Change" button. To delete a connection, select it in the list and click "X" button.

To move connections from one group to other:

- Select connections in first group;
- Drag and drop them to the destination group in the "Groups" list.
- If connections are protected with Group ID (group password), at next step you can specify new group password, which will be assigned to moved connections.

Important! Group parameters are stored in settings of a client computer and *on the client computer*. Though the Workspace Manager can move connections to other group immediately (within the workspace of this teacher computer), to re-assign Group Name and Group ID in settings of a client, and to make these changes visible for other teacher computers, first this client computer should be connected by this teacher at least once after the operation of moving to other group is processed. Upon first connection the software will transfer new settings to the client. This means that until this moment, old group settings will be in effect on *client* side. Particularly, **the client computer will have old group password, and will react on search requests from the original group.**

Import tools.

Using the Workspace Manager you can easily import connections from the Active Directory, Network Neighborhood or custom text file to any group.

To import computers from the Active Directory, open the "Active Directory" tab at right pane of the Workspace Manager; select computers there and drag-drop them to the "Connections of this group" list. In the same manner you can move connections from the Network Neighborhood (the "Network" tab) or custom text file (the "Text file" tab). Opening a file on the "Text file" tab, Net Control 2 will check the file for DNS names or IP addresses. All entries of the text file, which contain invalid names/addresses, will be omitted.

To apply changes close the Workspace Manager.

K. IMPORT CONNECTIONS FROM TEXT FILE

To create connections and groups lists from a custom text file:

1. Click **Import Connection from CSV File** command from the sub-menu of the Search button.



2. In the **Import Workspace** window, describe the structure of information in imported file.

An example: imported file contains information in CSV (comma-separated values) format:

COMPUTER01,LAB1,192.168.0.2

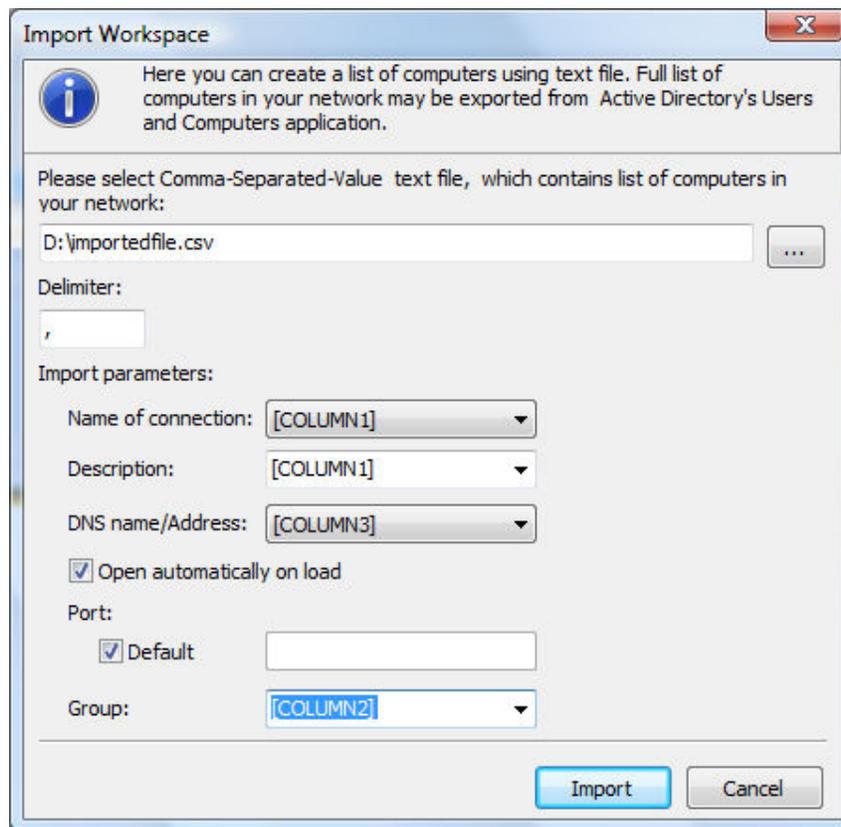
COMPUTER02,LAB1,192.168.0.3

...

COMPUTERXX,LAB1,192.168.0.XX

I.e. values are delimited with comma sign, first value is computer name, second value is a workgroup, third value is IP address.

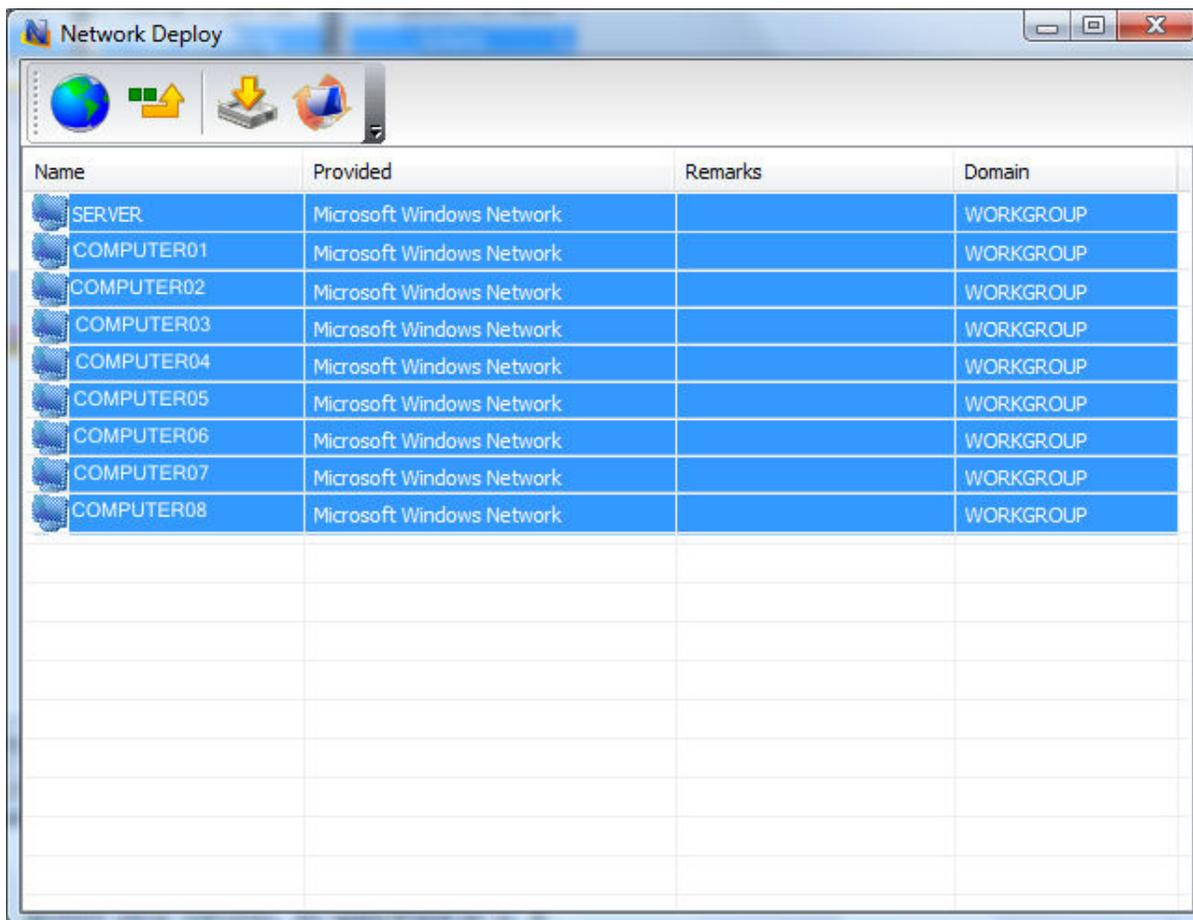
1. Open File, click the [...] button.



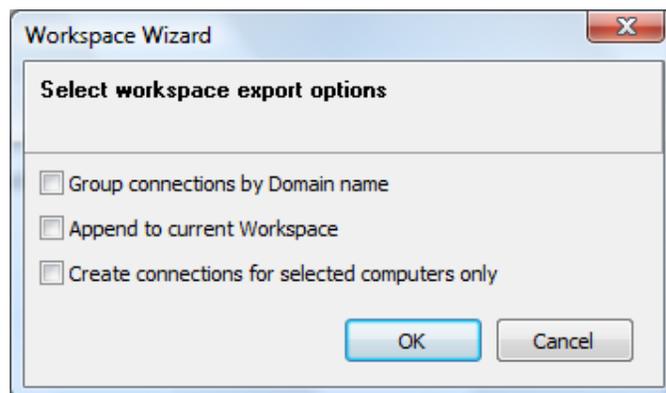
2. According to our file, name of connection is in first column, IP address is in third column, Group name is in 2nd group.
3. Click the Import button and restart the program.

L. IMPORT CONNECTIONS FROM NETWORK NEIGHBORHOOD

1. Click Net Deploy tool button on Advanced Tools tab.
2. Select the computers that should be imported.
3. Click the Export Computers to Connections List button.



4. Set up additional parameters:



Group connections by domain name - Net Control 2 will create a new group with the name of the domain and will import the connections to this group.

Append to current Workspace - If checked, imported connections will be added to current workspace; otherwise old connections will be deleted.

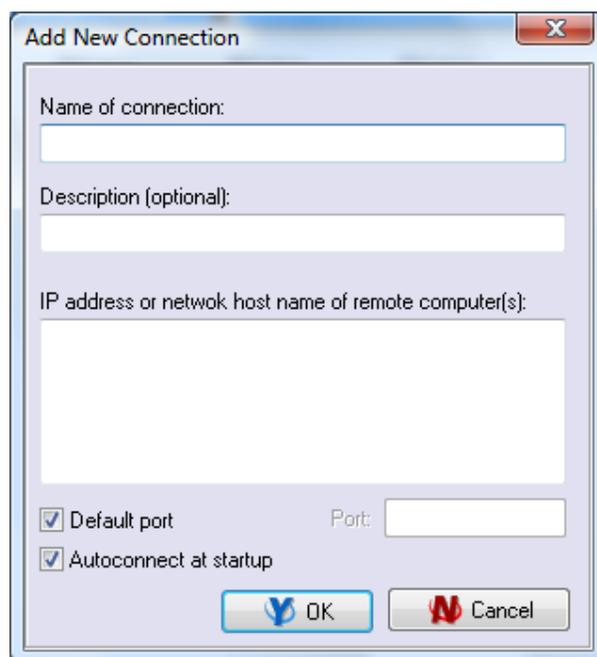
Create connections for selected computers only - When not selected, Net Control 2 will import all connections from the computer's list.

5. Click the OK button and restart the program.

M. HOW TO ADD/REMOVE/RENAME CONNECTIONS MANUALLY

To add new connection:

- click the menu command **N -> Connections -> Add** or press the **Insert** key
- specify the **Name of connection**
- add an optional description
- **IP address or network name** of user computer
- click **OK**



To delete one or several connections from a workspace:

- select connections
- click the menu command **N -> Connections -> Delete** or press the **Delete** key

To rename the connection, change IP address or network name and description:

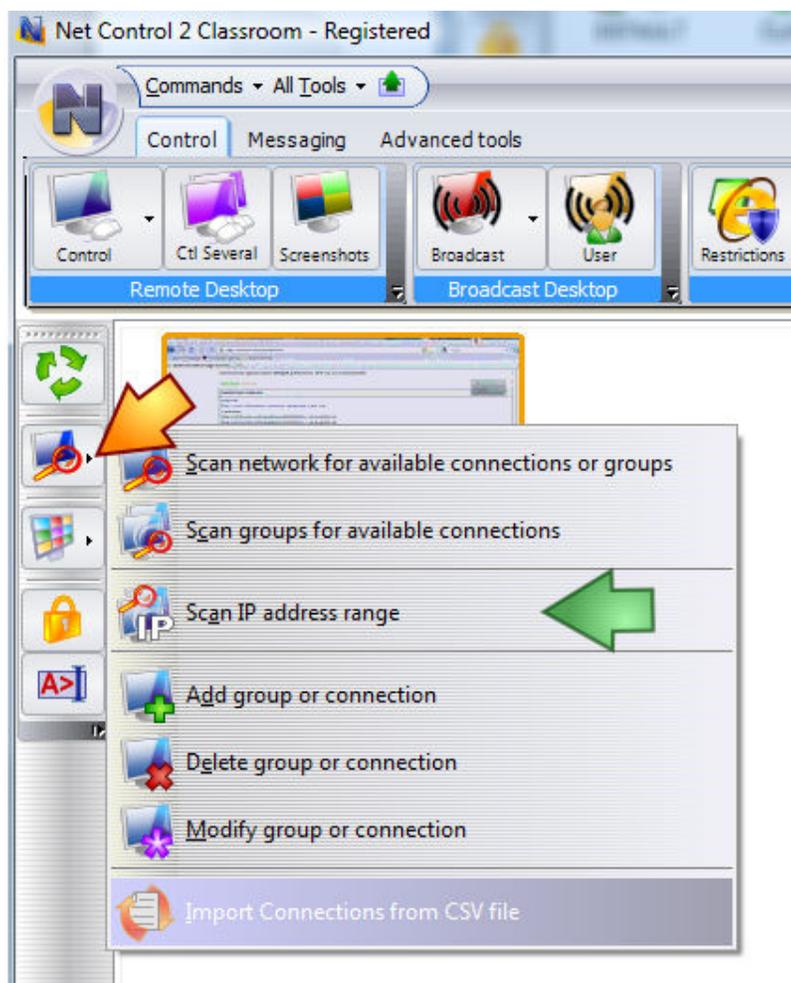
- select connection
- click menu command **N -> Connections -> Edit**
- modify properties of connection
- click **OK**

N. HOW TO SCAN IP ADDRESS RANGE OF NETWORK FOR

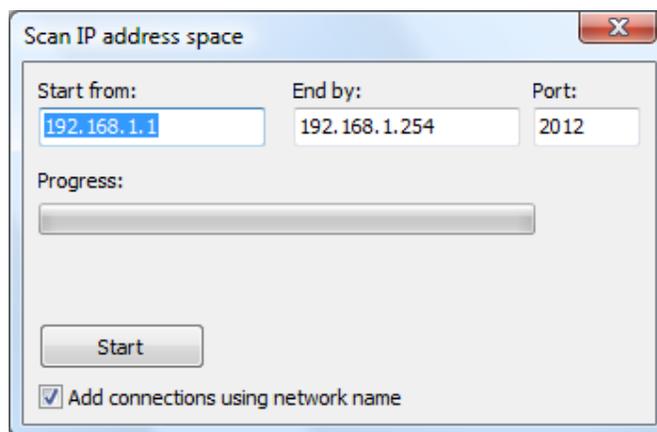
AVAILABLE CONNECTIONS

Several types of networks do not support Broadcast mode of network scanning. In this case, you can scan the network for available connections using the Scan IP Range feature:

- click **Scan IP Range** command from sub-menu of **Scan Network For Available Connections** command on the *left toolbar*:



- specify scanning range as starting and ending IP address
- if your network uses dynamic IP addresses (addresses are not constant), verify that “**Add connections using network name**” option is enabled; if your network uses static addressing, this option may be disabled.



- click the **Start** button to start operation.

Please note: This operation may take a long time, up to 20-30 minutes per one class C subnetwork (253 computers).

O. SPECIAL MODES: USER-CONNECT (WI-FI) MODE.

This mode is useful when a network consists of several *virtual networks (VLANs)* or wireless networks and when standard scanning routines fail.

Each user computer may be configured to connect one or several administrators.

When an Administrator computer is connected, Net Control 2 will create a new shortcut on the Administrator side for this connection and will add it to the workspace. When the connection is closed, the shortcut will be automatically removed from the workspace.

To enable *User Connect Mode* during setup, please refer to **Chapter C** of this manual - **WiFi Mode**.

To enable **User Connect Mode** when the software is already installed on user computers:

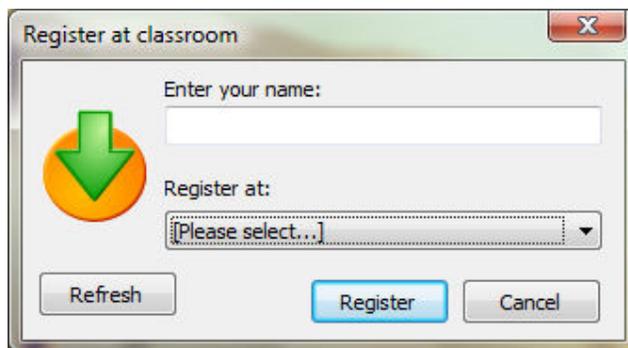
- select the computer in Net Control 2 Administrator and click the menu command **N -> Options -> Remote Computer Options**
- or -
click N (Net Control 2) icon in the System Tray of User computer and then click the menu command **Configure**
- On the **Connection Mode** tab, enable “**Incoming and User connections**” or “**User Connections Only**” mode
- In the “**Specify IP address**” field, specify one or several IP addresses or network names of Administrator computers

P. SPECIAL MODES: STUDENT REGISTERING.

This mode is useful when students (users) use notebooks/laptops and can move from one classroom to other, i.e. from one Administrator to other. This makes it impossible to create a constant workspace (connections list) on the Teacher’s computer.

When Student Registering mode is enabled, either automatically at Windows startup or manually after clicking *Student Registration* icon on Desktop, Net Control 2 will display

on the Student computer **Register at classroom** window. The student needs to enter his/her name and select one of currently available classrooms:



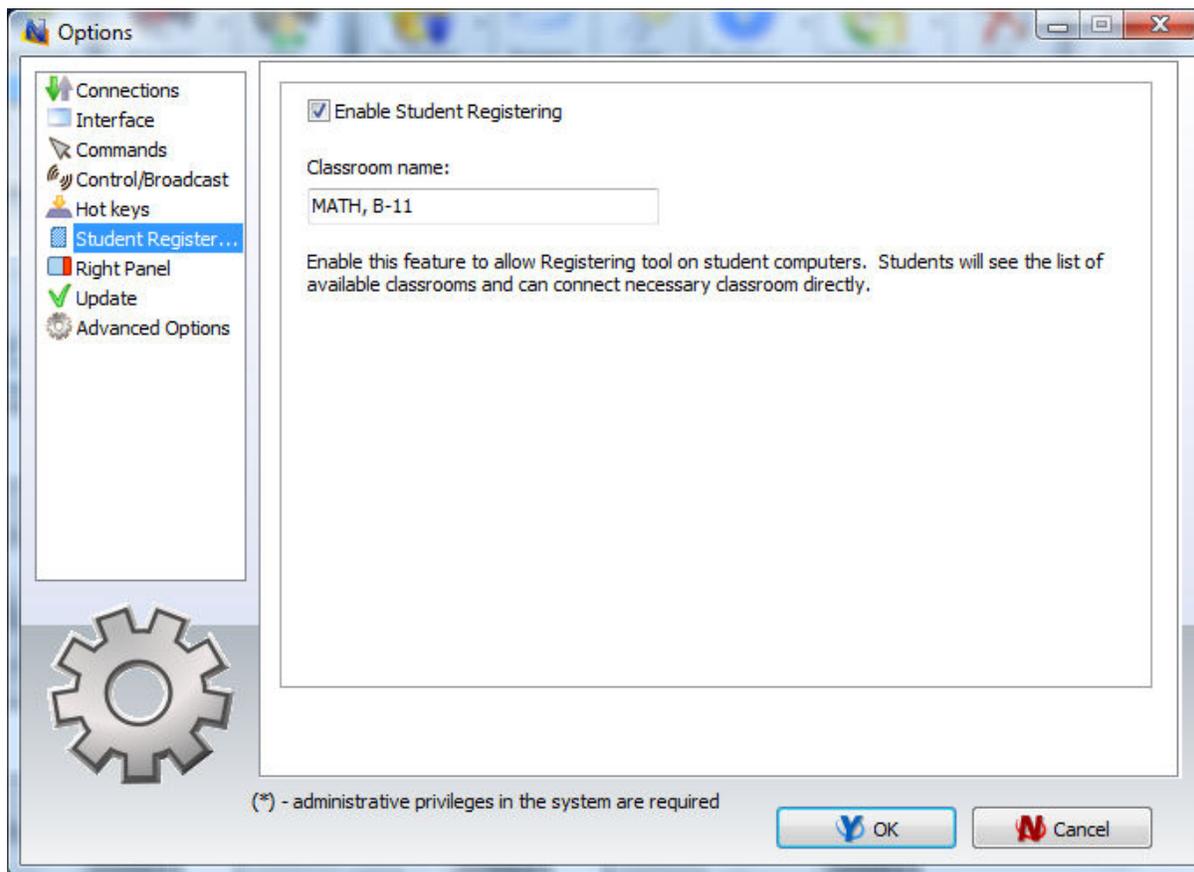
(Program scans for available in the network classrooms automatically at startup)

When a student selects a classroom, it will be attached to the corresponding Teacher and a corresponding connection will be created in the Teacher's workspace.

To enable *Student registering*: you can configure it, install the software with Role Manager (please see **Chapter C**), or enable this mode in both Administrator and User Components at any time:

P.1. How to enable Student Registering in Administrator Module:

- open Net Control 2
- click menu command **N -> Options -> Control Options**
- on the **Student Registering page**, enable **Student Registering mode** and specify a name of classroom:

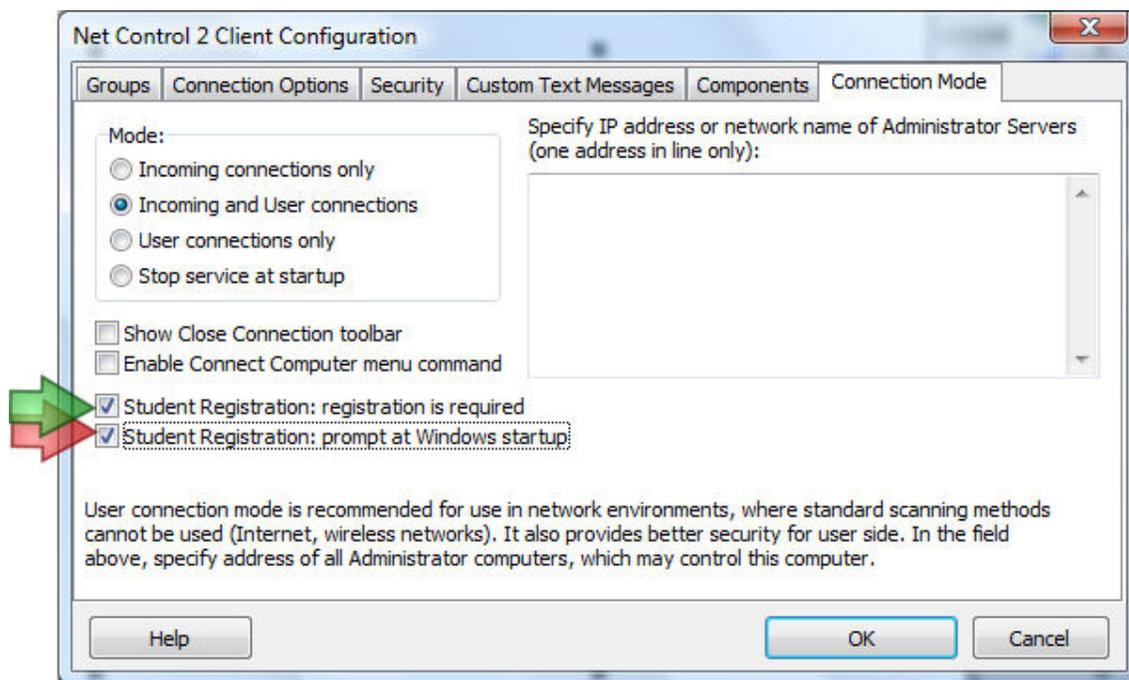


- Please also verify that the “User-connect mode” option is enabled on the **Connections** tab.
- Click **OK**.

P.2. How to enable Student Registering on User computers.

We recommend enabling Student Registration in Role Manager, as specified in **Chapter C** of this manual. To change Student Registering options on the user computers:

- in Net Control 2 Administrator, select the computers
- click menu command **N -> Options -> Remote Computer Options**



- enable “**Student Registration: prompt at Windows startup**” option if Net Control 2 should require registration at Windows startup.
- enable “**Student Registration: registration required**” option if the Registration prompt on the Student computers should be displayed in full-screen mode, preventing switching to other programs, until the student registers at a classroom.
- Click **OK** to apply changes.

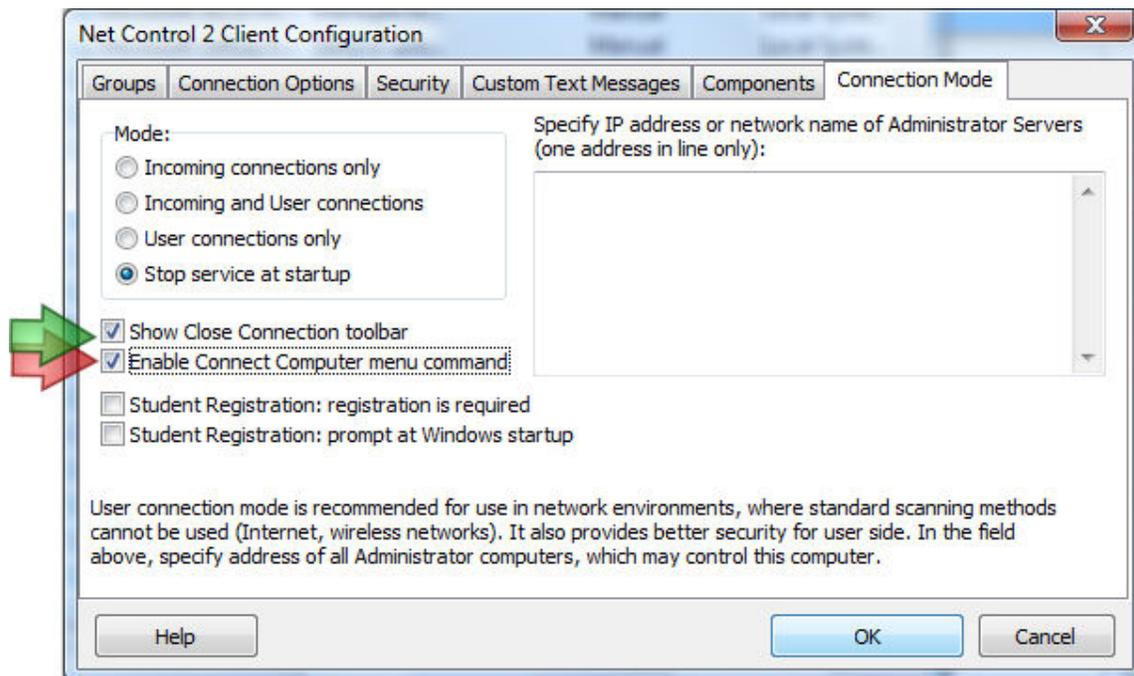
Q. SPECIAL MODES: START BY REQUEST.

When **Start by Request** mode is enabled, all network services provided by Net Control 2 will be **inactive** by default, i.e. the service will not allow any incoming connections, will not respond when the Administrator scans network for available connections etc.

To enable **Start By Request** mode, please use **Role Manager**, as specified in **Chapter C**.

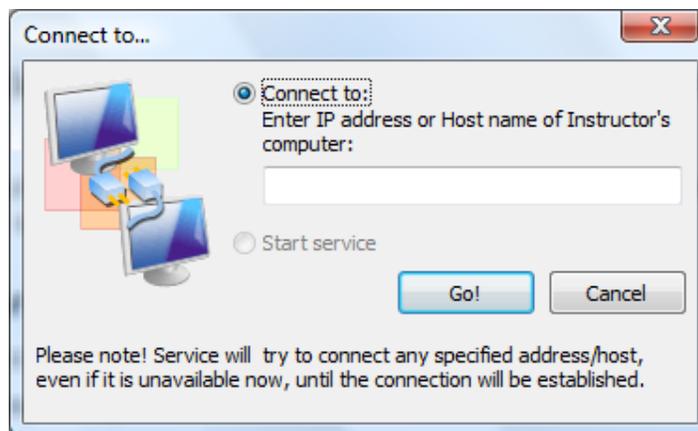
In addition, you can enable this mode anytime configuring the User Module as follows:

- in Net Control 2 Administrator, select user computers
- click the menu command **N -> Options -> Remote Computer Options**
- on the **Connection Mode** tab, enable **Stop Service at Startup** mode
- enable “**Enable Connect Computer menu command**” option
- click **OK**



When the User needs to connect to an Administrator computer, they can enable the service as follows:

- click **N (Net Control 2)** icon in the System Tray
- in the appeared menu, click the **Connect Computer** command



- specify the IP address or network name of Administrator computer, which should be connected and click the **Go!** Button
- To stop the service, click **Stop Service** button in Net Control 2 System Tray menu

R. DETAILED CONFIGURATION OF USER MODULE.

The User Component may be configured remotely from Administrator Module or on a User Computer directly.

To configure User Module remotely from Administrator Component:

- select the User Computers

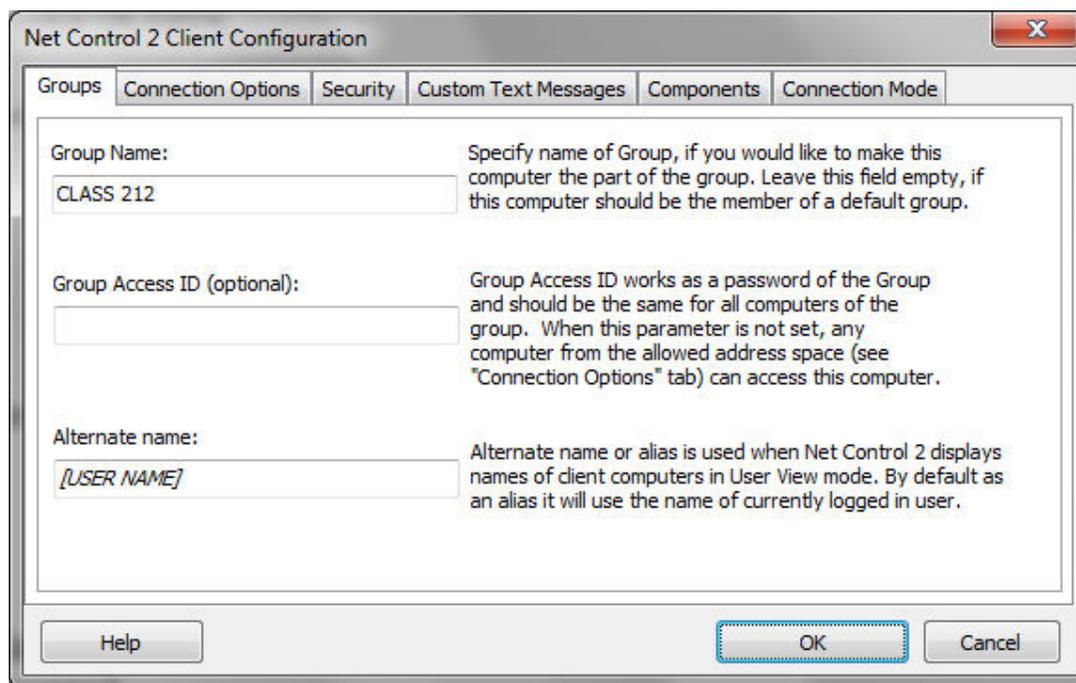
- click menu command **N** -> **Options** -> **Remote Computer Options** or just click the **User Opts** button on the **Advanced Tools** tab
- configure the options as specified below
- click the **OK** button

To configure User Module on User computer directly:

- click on the Net Control 2 icon in the System Tray
- then click the **Configure** menu command
- Configure options
- click **OK**

Configuration window:

Groups tab:



The screenshot shows the "Net Control 2 Client Configuration" dialog box with the "Groups" tab selected. The dialog has a title bar with a close button (X) and a tabbed interface with the following tabs: "Groups", "Connection Options", "Security", "Custom Text Messages", "Components", and "Connection Mode". The "Groups" tab contains three input fields with corresponding help text:

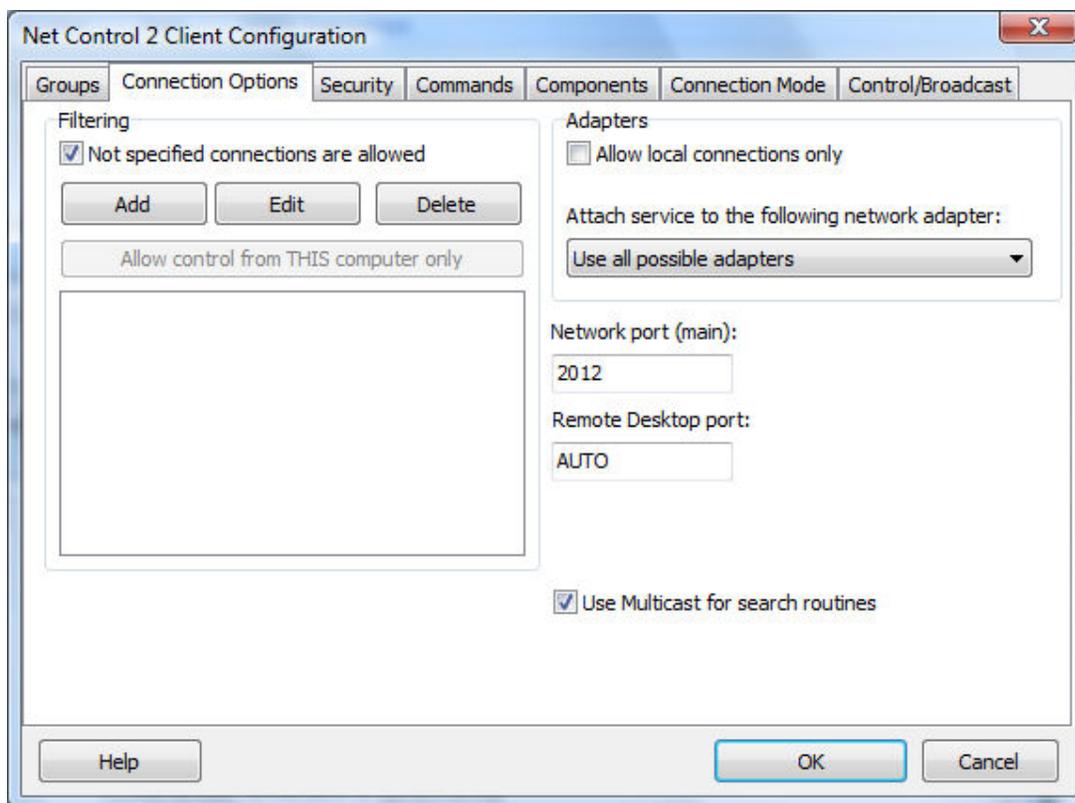
- Group Name:** The input field contains "CLASS 212". The help text reads: "Specify name of Group, if you would like to make this computer the part of the group. Leave this field empty, if this computer should be the member of a default group."
- Group Access ID (optional):** The input field is empty. The help text reads: "Group Access ID works as a password of the Group and should be the same for all computers of the group. When this parameter is not set, any computer from the allowed address space (see 'Connection Options' tab) can access this computer."
- Alternate name:** The input field contains "[USER NAME]". The help text reads: "Alternate name or alias is used when Net Control 2 displays names of client computers in User View mode. By default as an alias it will use the name of currently logged in user."

At the bottom of the dialog, there are three buttons: "Help", "OK", and "Cancel". The "OK" button is highlighted with a blue dashed border.

Group Name - Group Name to which the computer belongs. For more information about groups, please see *Chapter 1*.

Group Access ID - Group ID (password) for current group. For more information about groups, please see *Chapter 1*.

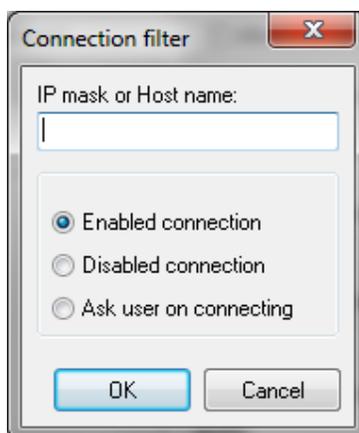
Alternate Name - this name will be displayed when Administrator switches view mode from *Computer Name View* to *User Name View*. If it is left blank or [USER NAME] value is specified, the name of currently logged in user will be displayed.

Connection Options:

Filtering - control access to this computer through Net Control 2 Administrator 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 allowed. 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 User 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 Administrator 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.

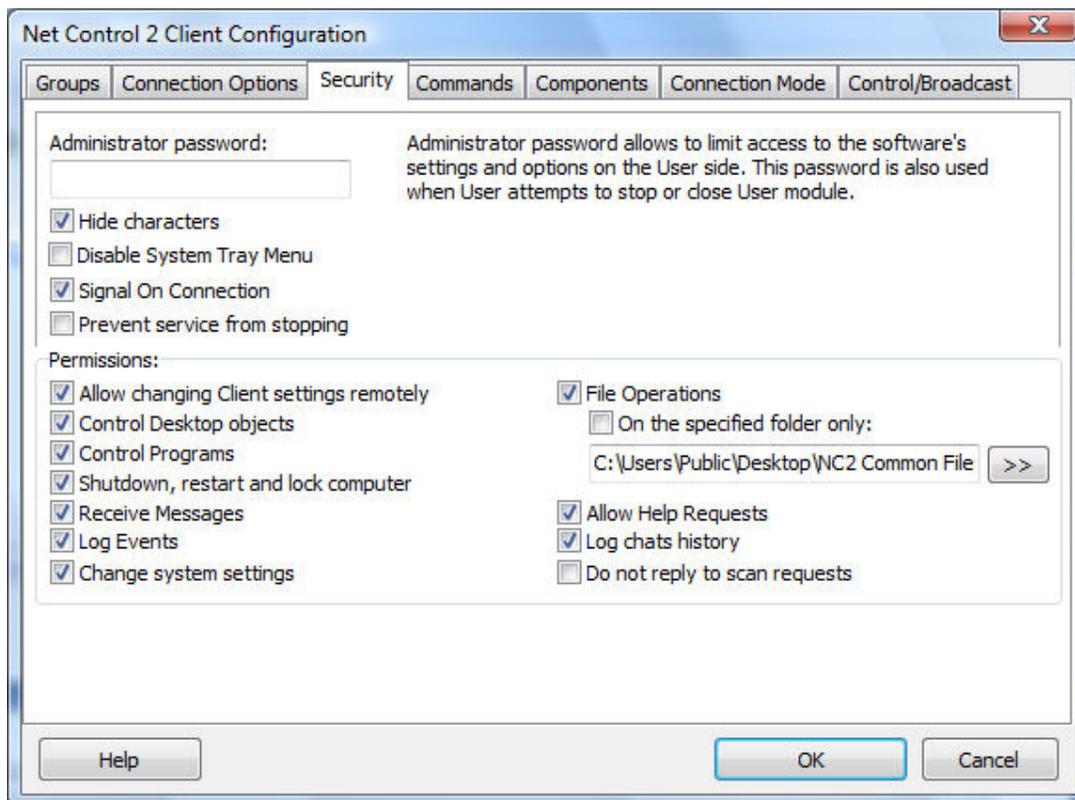
Example: if your computer has access to a local network through a LAN Adapter and to the Internet through a WAN Adapter, you can select the first one to make Net Control 2 service available only within bounds of local network.

Ports:

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

Remote Desktop port – when it is set as AUTO (default, recommended), the port of Remote Desktop services will be calculated as MAIN PORT + 7. The same value should be the set up on both Administrator and User computers. On the Administrator side, this value may be set up in N -> *Options* -> *Control Options* -> *Connections tab*.

SECURITY tab



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 would like 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 administrator computer will be accompanied by sound signal and text message.

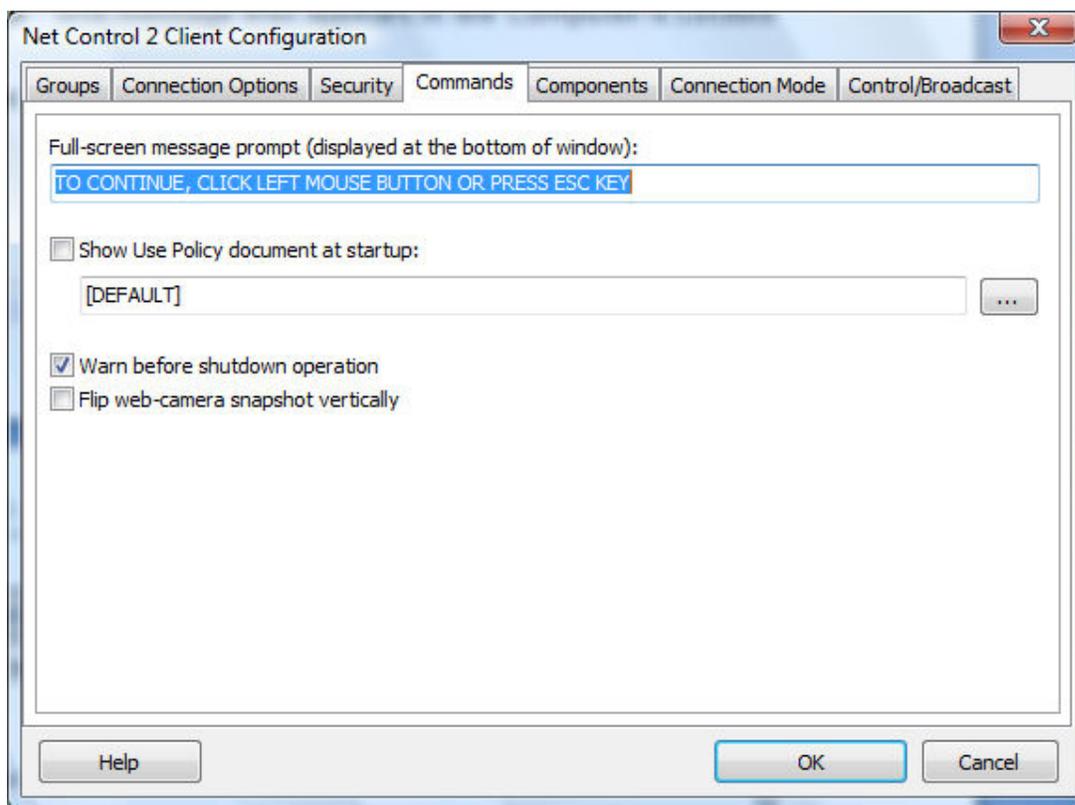
Prevent service from stopping - when checked, the user will not be able to stop Net Control 2 Client service using Services console of Administrative Tools or net.exe system program.

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 Administrator 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 Administrator 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, user can send Help requests to Administrators 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* 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.

COMMANDS:



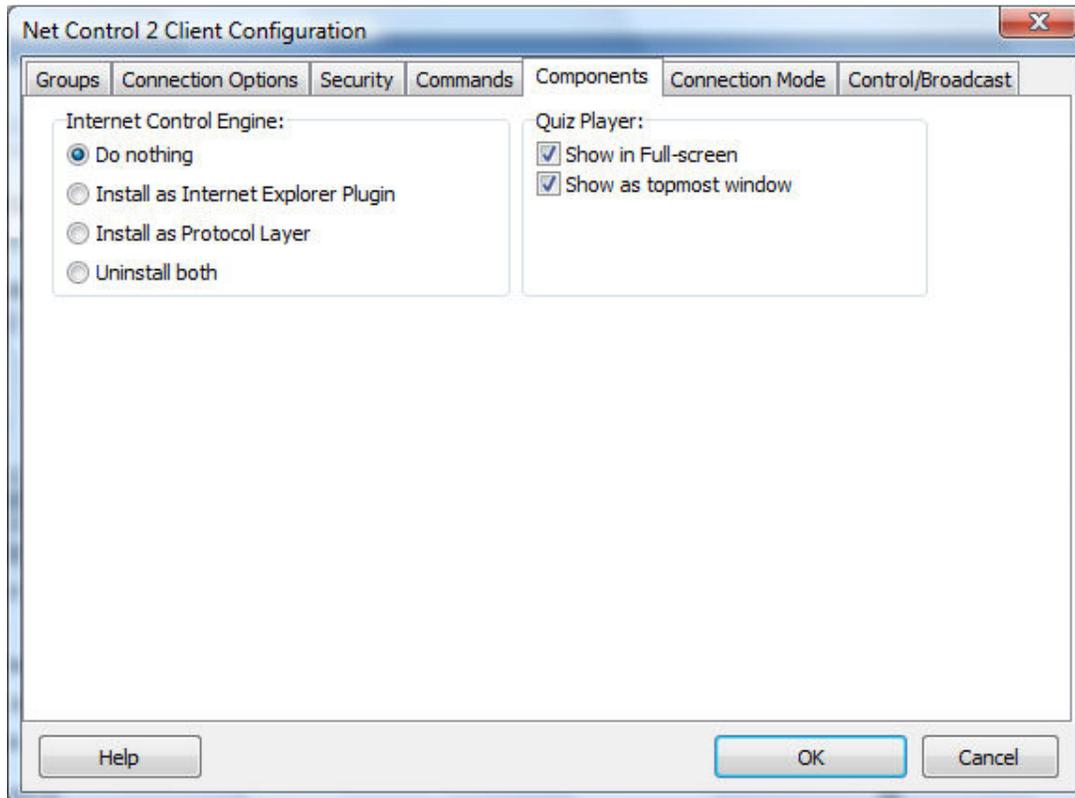
Full screen message prompt - text message that appears at the left-bottom corner of the full-screen message.

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 Administrator).

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

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

COMPONENTS tab:



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

Install as Internet Explorer Plug-in - 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.

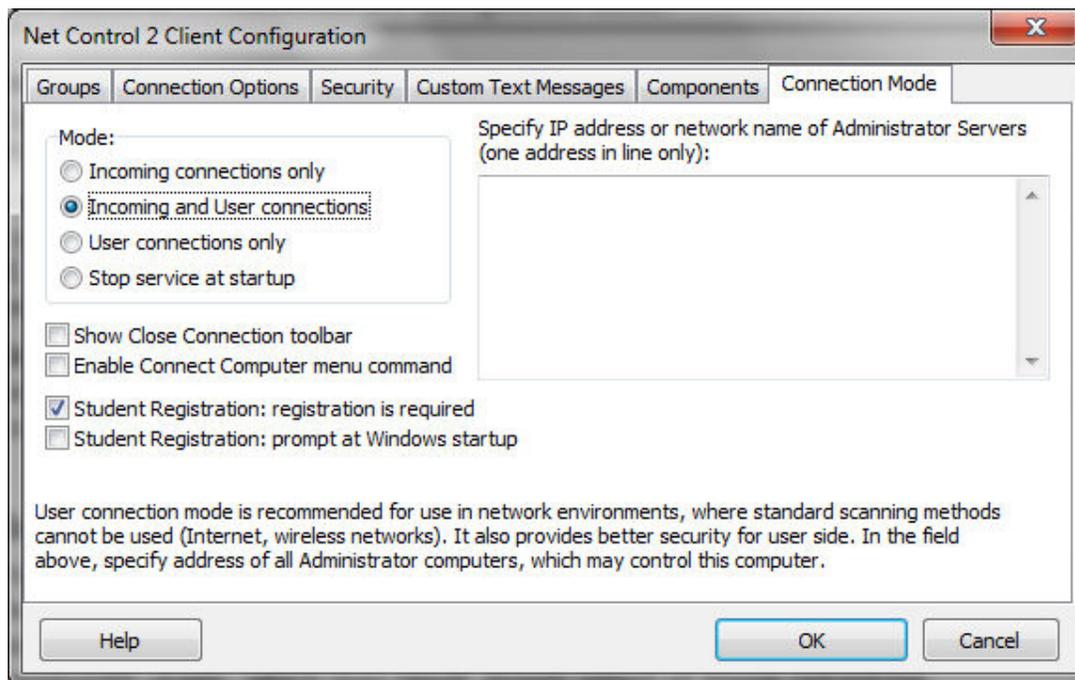
Install as Protocol Layer – schedules installation of the Net Control 2 Internet Control Engine as a Protocol Layer. This mode is less compatible with third-party software than IE plug-in mode, but provides additional functionality and does not depend on Internet clients (browsers, e-mail clients etc.)

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.

Quiz Player:

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

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

Connection Mode:

Mode - option determines what types of connections are allowed for this computer

Incoming connections only - only standard connections of Net Control 2 Administrator are available

Incoming and User connections - (default) - both standard and user-connect connections are allowed.

User connections are connections, made by the User module, to the specified in its configuration IP address or network name of Administrator computers. These addresses/names should be listed at right pane (**Specify IP address or network name of Administrator Servers** field).

User connections only - only user-connections are allowed.

Stop service at startup - the service is not enabled at startup. To enable the service, the User either needs to resume the service by clicking on the Resume Service command in Net Control 2 System Tray menu or to connect Administrator computer by using the Connect computer command. This mode is default for Start by Request mode as specified in Chapter C.

Additional options:

Show Close Connection Toolbar - when enabled, special “Close Connection” toolbar will be displayed on the User Computer, if the connection was initiated by the User, via **Connect Computer** Tray Menu's command or via Student Registering window.

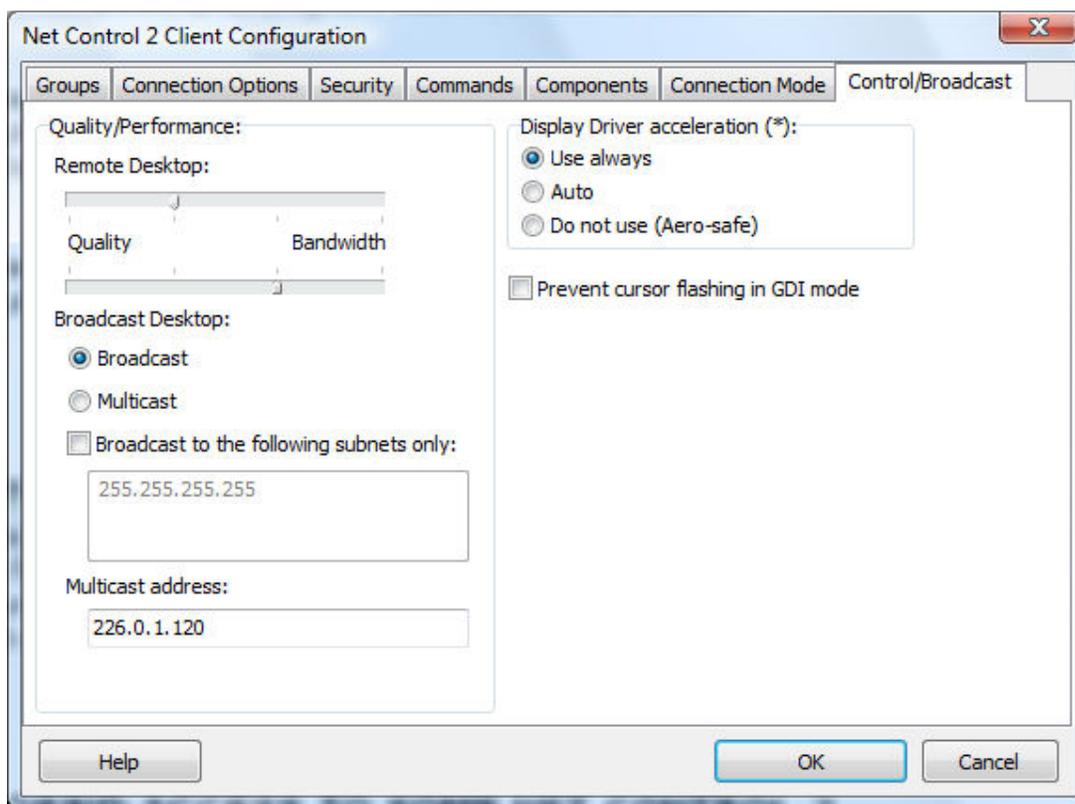
Enable Connect Computer Menu command - when enabled, the Connect Computer command of Net Control 2 Tray Menu will be enabled, so the user will be able to connect

to the Administrator computer, specifying its IP address or network name.

Student Registration: registration is required - when enabled, Student Registration window will be displayed in a full-screen window, which prevents switching to other programs until student registers in the system.

Student Registration: prompt at Windows startup - when enabled, Student Registration window will be displayed at the Windows startup immediately after the user logs on to the system.

Control/Broadcast tab.



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.

S. HOW TO DISABLE GROUPS TAB OF THE ADMINISTRATOR CONSOLE.

In several cases the Administrator 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 -> Control 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.

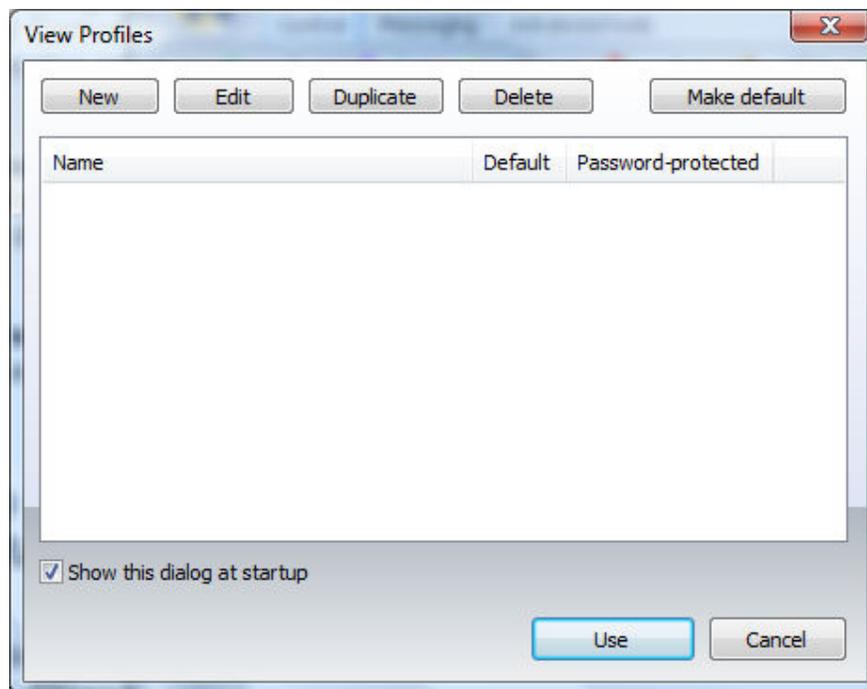
T. HOW TO FORBID ACCESS TO SOME NET CONTROL 2 ADMINISTRATOR FEATURES.

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

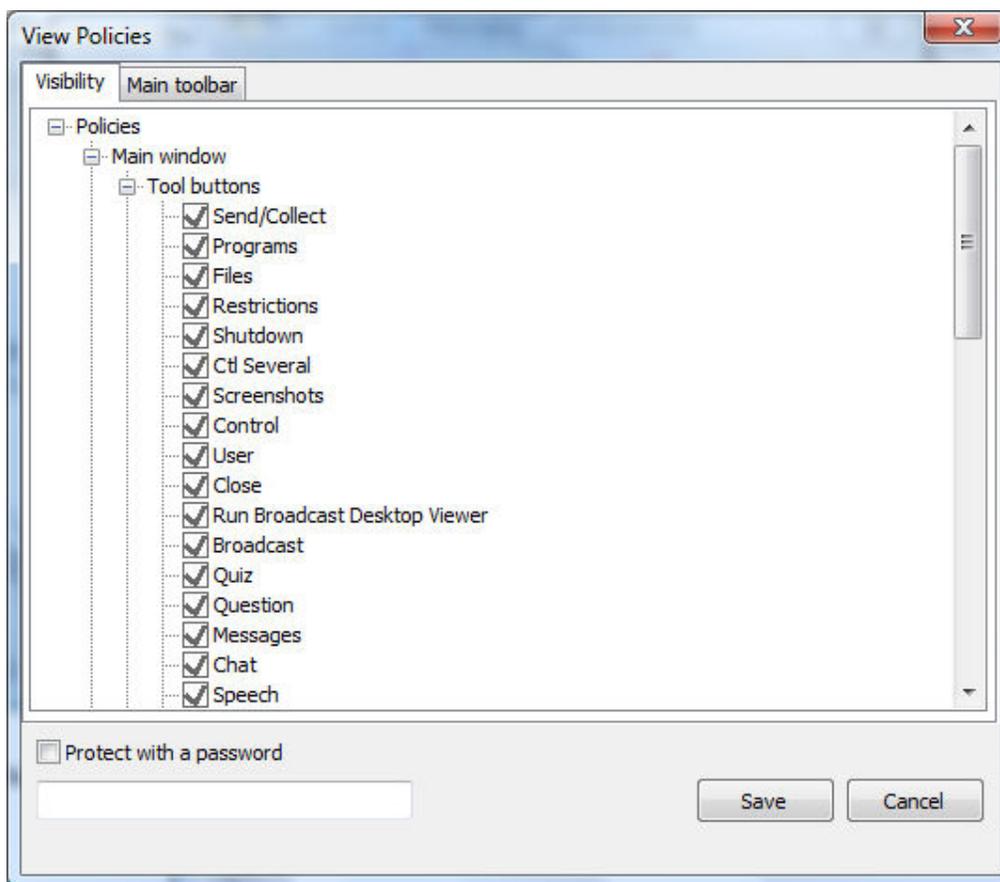
This is realized through the **View Profiles** tool. The Administrator may create several view profiles, protect some profiles with a password or mark some profiles as “**default**”, i.e. make them active automatically at startup.

1. To create a custom View profile:

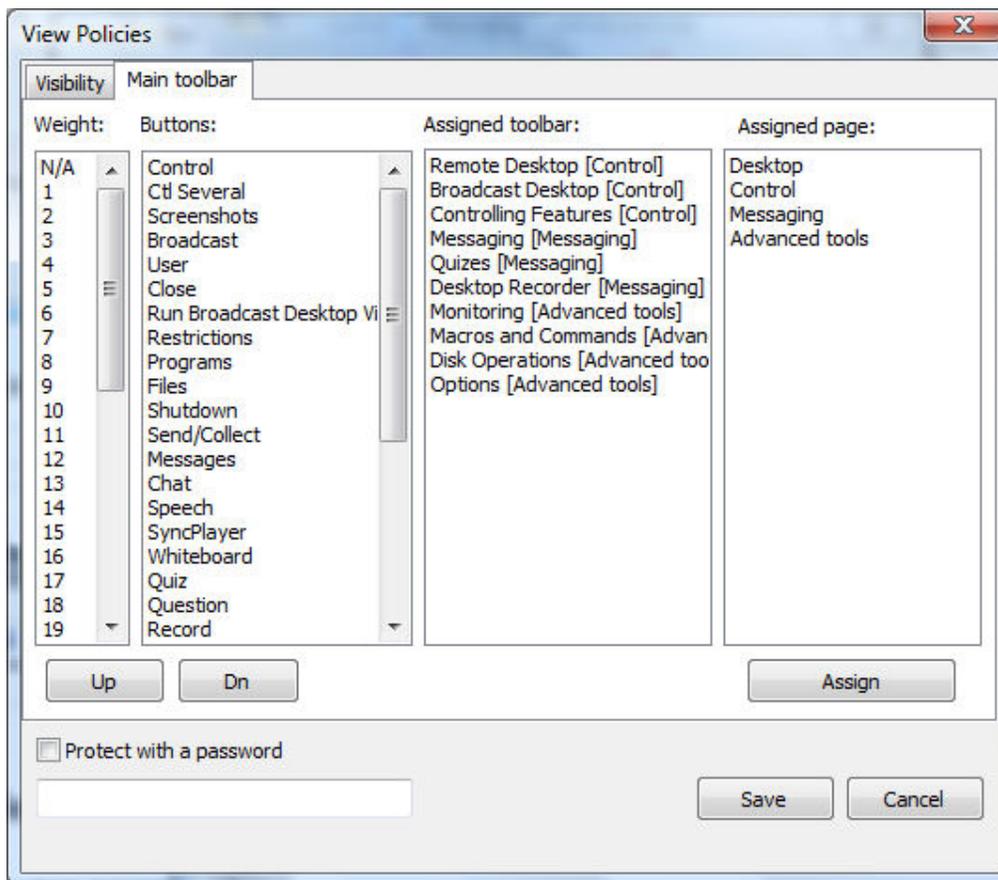
- click menu command N -> **Options -> View Profiles.**



- Click the **New** button.
- On the **Visibility** tab, check only those window elements (*buttons, fields, menus*), which should be visible (available for user) in the new configuration:

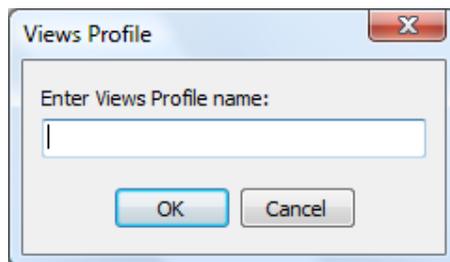


- on the **Main toolbar** tab you can re-group the buttons on tabs and toolbars:

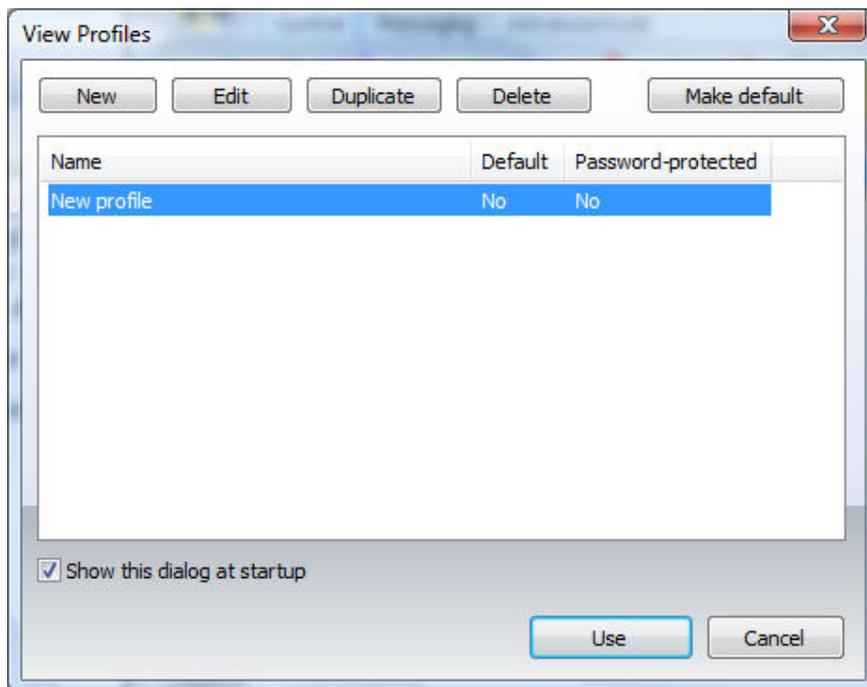


Selecting a button in the **Buttons** list, **Assigned toolbar** list will display a toolbar where this button will be placed. Accordingly, **Assigned page** will display a page (tab), where this toolbar will be placed. Changing the **Weight** parameter, you can move buttons within selected toolbar to left (weight is lesser) or to the right (weight is higher). Click the **Assign** button to apply changes for each button.

- 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 Administrator Module.

If the **Show this dialog at startup** option is enabled, Net Control 2 Administrator 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 Administrator will prompt for this password before applying selected profile.

U. HOW TO PROTECT ACCESS TO NET CONTROL 2 WITH PASSWORD.

To protect access to Net Control 2 Administrator, click the menu command **N -> Security -> Setup Client Password**, specify the password, and click **OK**.

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

- click **N** (Net Control 2) icon in the **System Tray**, then click **Configure** menu command. 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.