THE CLASSROOM MANAGEMENT SOFTWARE



**PRO** 

(PROFESSIONAL EDITION)

# THE STUDENT MODULE FOR MAC OS X



Revision 1.0 (February 6, 2018)

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## **General information**

Net Control <sup>2</sup> PRO (Professional Edition) is a classroom management software for easy controlling, monitoring and managing computers in local networks.

The software consists of three main parts – **Connection Server, 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** <sup>2</sup> **PRO** 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. Finally, Connection Server component should be installed on a computer in the network that will act as a server, and will be connecting students and teachers, will store the environment and settings.

This guide describes only installation and initial configuration of the student module for Mac OS X. Other manuals and guides are available in the *Downloads* section of our website and provide more detailed information regarding installation and use Net Control 2 Professional Edition: <a href="https://www.netcontrol2.com/downloads">https://www.netcontrol2.com/downloads</a>

## Hardware requirements and software environment

OS X 10.9 – 10.13 (Mavericks – High Sierra) on a compatible hardware. 10 Mb/s wireless or Ethernet local network.

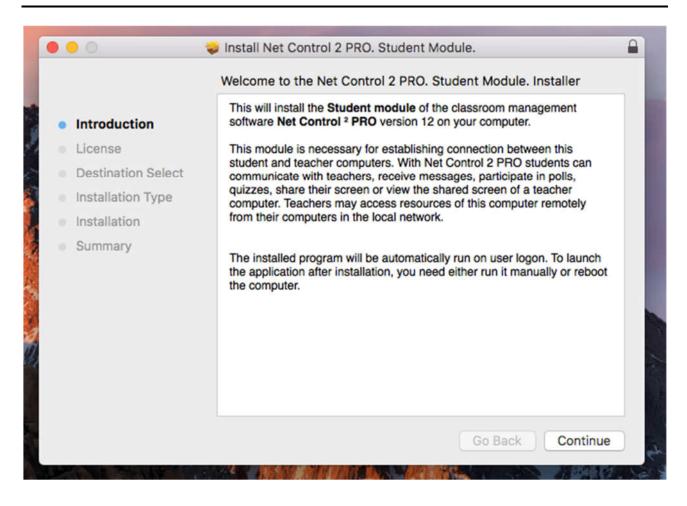
#### A. Installation

We recommend to install the software on the Connection Server computer first.

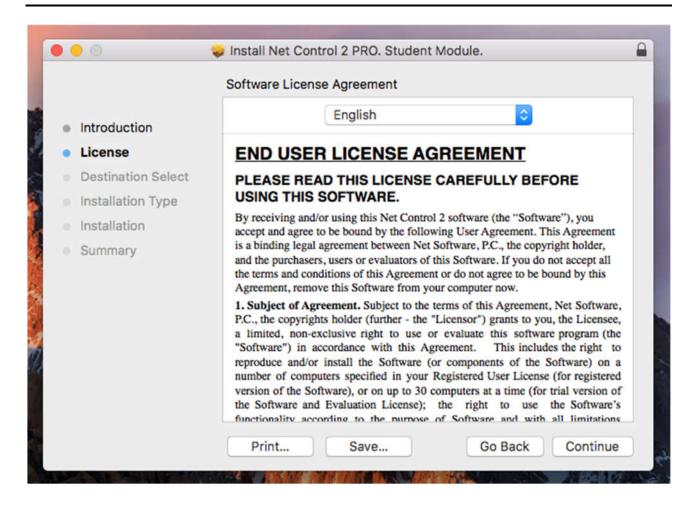
The setup program requires administrative privileges, in the process of installation you will need to provide in the system dialog window credentials of a user with administrative privileges.

To install the student module for OS X:

 Run the Net Control 2 PRO Student Module installation package (most often net120orstud-mac.pkg).



2. Read carefully and accept (if you agree) the End-User License Agreement.



#### 3. Select the destination folder

We recommend to use the default path on the main, system hard disk of the computer.

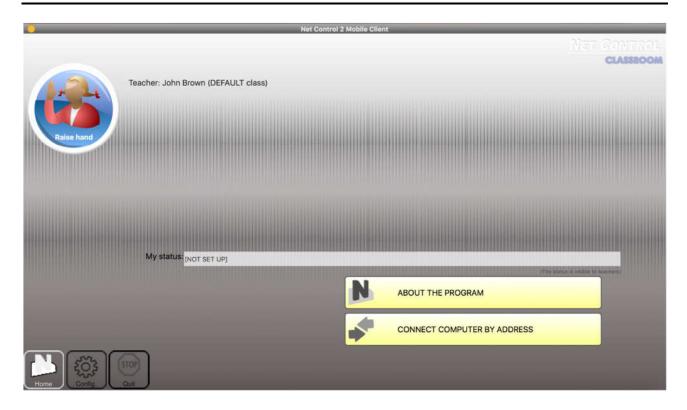
#### 4. Reboot the computer to finish installation.

The student module will be registered for automatic startup on a user logon. The student module will be visible on teacher computers and respective functionality will be available only after a user logs in to the system.



When the student module is loaded and running, the most important features, statuses and information are available in the Student Console. To open the student console and access its features, click **Net Control 2 icon** in the OS X main menu (the **N** icon).

If the icon is invisible on the main menu (that is possible if you are working with an application that was run prior the student module start up), please try to open any new Finder window or a program, or click on Desktop, the icon should appear now



To hide the Student Console, click "Hide" button on the top-left hand corner of the student console window:



## B. Configuration.

On the first start, the student module will automatically display the **Configuration** page, where you need to make primary configuration of the student module. This page is displayed automatically only if settings were not applied earlier.

To change settings at any moment later, click Net Control 2 icon on the main menu bar, then use Configure button of the Student console:



The most important settings that you may need to set up on the first start.

Connection Server (on "Connections" tab) – specify here an IP address (preferred) or a DNS

name (computer name) of Connection Server computer, i.e. a computer in the network, where Connection Server components were installed. This parameter is required!

**Administrator password** ("Security" tab) – set up a password here to prevent unauthorized access to the student module settings and Stop/Exit commands of the student console.

**Signal on Connection** ("Security" tab) – enables a sound signal that will be played when the student connects to a teacher. This option is enabled by default.

Show popup notifications for certain operations ("Appearance" tab) – enables popup notifications when a teacher performs some controlling operations: connects to the computer using Control / Remote Desktop commands, locks the computer and so on. This option is enabled by default.

## Other settings

#### **Connections**

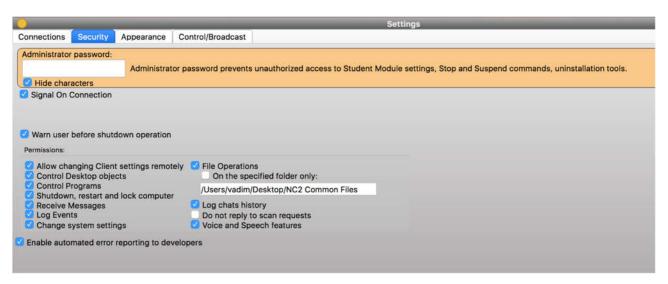


**Connection Server** – an IP address or DNS name (computer name) of the Connection Server computer. **This parameter is required!** 

**Student ID** – a custom identifier for this computer, may be used by Connection Server for sorting computers to groups.

**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



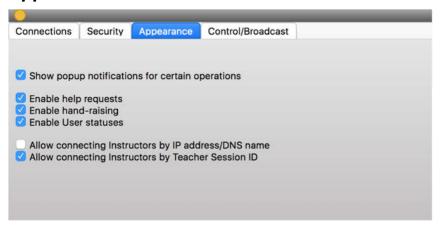
**Administrator password** is used when a user attempts to change the settings of the student module or clicks the menu commands "Stop" or "Exit". We recommend setting up this parameter if you need to prevent stopping the Net Control 2 PRO student module or unauthorized configuring the service.

**Signal On Connection** - when enabled, on any established connection with a teacher, the student module will play a sound signal.

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

- Allow changing Client settings remotely when this permission is set, the Teacher can change the student module settings remotely from the teacher module.
- **Control Desktop objects** if enabled, teachers will be able to access Desktop screenshots, thumbnails, control the computer remotely with a keyboard and mouse and access other desktop-related features.
- **File Operations** a 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** a permission to execute and terminate programs from the teacher module.
- **Shutdown, restart, lock** a permission to perform power-related operations, including shutdown, reboot, stand-by etc.; lock and unlock the computer remotely.
- Receive messages a permission to receive messages from the Teacher computer.
- Log Events a permission for Events Watcher and Events Logger tools.
- Change system settings access to system settings.
- **Allow Help Requests** when enabled, a student can send Help requests to Teachers through the Student console.

## **Appearance**



**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.

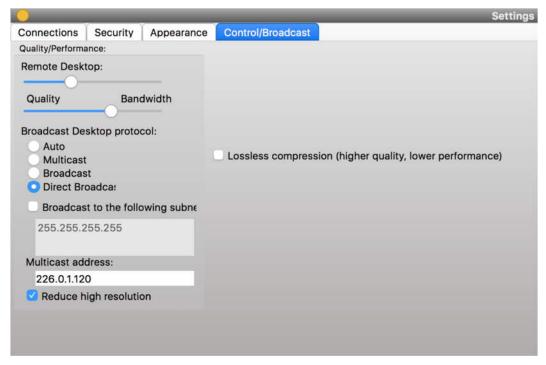
**Enable User statuses** – enables "user statuses". The user status is a short string that is visible on teacher computer in student connection properties, and it's shown in a tooltip when a student is changing his/her status. With this tool students can quickly communicate with teachers sending short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

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

**Allow Self-registration** – if enabled, students can connect necessary teachers just by selecting them from a list of available teachers. The Self-Registration feature should be enabled on teacher computers also.

#### Control/Broadcast



#### Quality/Performance.

Use this option to adjust the performance/quality level 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 – <u>enable this mode, if you experience some issues with the performance of</u>
<u>Broadcast Desktop tool</u> 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.

**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.

### C. How to uninstall the student module

To uninstall the software, locate in *Finder* your /*Applications* folder, find in the folder *Net Control 2 PRO. Student Module* program, right click it, move to *Trash*. Administrator privileges are required to uninstall the software.

If you need to prevent unauthorized uninstallation of the software by students, we recommend to adjust the program folder privileges (/Applications/Net Control 2 Student Module), enabling read-only access for student user accounts.

### D. Features

Commands and features of Net Control 2 PRO are described in details in the Net Control 2 Tools and Features Guide.

The student module for OS X currently supports the following features only:

- Student computer **screenshots in thumbnails** on the teacher computer
- Student computer information (an operating system version, computer name and version etc.)
- "Control"/Remote Desktop tool. Not supported features: screen annotations, lock the student computer during the remote session, send Ctrl+Alt+Del, "Move an active window to the top-left screen corner" commands.
- Broadcast Desktop tool
- Broadcast Student's screen to others
- Screenshots View
- Internet restrictions. Safari and Google Chrome browsers are supported only.
- Program restrictions.
- Sound muting.
- **Program Manager:** terminate programs, run programs, documents, URLs etc. from Desktop or /Applications folder; run programs/URLs from a command line.
- **Shutdown manager**: shutdown, reboot, logoff, hibernate and sleep the student computer (if allowed by the operating system settings). The "forced" style for shutdown operations may be not supported.
- Send/Collect Files file operations are currently available only on Net Control 2
   Common Files folder, on OS X systems it is mapped to /Users/UserLogin/Documents/Net

Control 2 folder (where /Users/UserLogin is a home folder of a currently logged in user).

- **Lock** locks the student computer temporarily. "Keep the locked state after reboot" option is not supported.
- Quick Run
- **Messages** full screen or windowed messages; setting up the **system sound volume** remotely. **Text-to-speech** using built-in Apple's TTS engine.
- Chats and Help requests.
- Student registration.
- Whiteboard.
- Rewards.
- Grades.
- Journal-related features.
- Quizzes.
- Polls.
- **Desktop Records Player.** Sound in records is not supported currently.
- Changing the student module settings remotely from the teacher module.
- **Connecting a teacher computer** from the student computer **by IP address** or a DNS name (if allowed by the student module settings).
- Students can **initiate connections to a teacher** by using the **Teacher Session ID**.
- Students can connect teachers using the Self-registration feature (by selecting a teacher from a list of available teachers).
- Raise Hand tool.
- Quick Statuses.

Other, not listed above features, most likely are not supported currently.

#### E. Other resources

**Net Control 2 PRO. The Installation and Configuration Guide** (for Windows) describes the main principles of the teacher and student module configuration:

https://www.netcontrol2.com/getfile?id=GUIDE112PR

**Net Control 2 PRO. The Tools and Features Guide** – provides detailed information about tools and features of the software:

https://www.netcontrol2.com/getfile?id=GUIDE212ST