

Classroom management software

# **NET CONTROL<sup>2</sup>**

for Linux

**CLASSROOM EDITION**

Version 23.3

**RELEASE NOTES**

for experienced users

This document describes the important points to consider when installing, configuring, and using Net Control 2 for Linux. Classroom Edition.

This document is addressed to users who are familiar with Net Control 2 Classroom software for Windows, and who need to implement the software in a Linux environment.

This document often further refers **The Net Control 2 for Linux Installation Guide. Classroom Edition** document, designated as [1], which can be downloaded here:

<https://docs.netcontrol2.com/Part1-23-Linux-ST-EN.pdf>

## I. Notes.

1. The software was tested only on Ubuntu 20.04, Ubuntu 22.04 and Astra Linux 2.12 Common Edition ("Orel"). Installation in other Debian-compatible 64 bit operating systems for x86-64 architecture may be possible, if presence of required packages is provided (required packages: libxmu-dev, libxtst-dev and libturbojpeg or libturbojpeg0; recommended packages: net-tools, espeak, alsa-utils, libwebkit2gtk-4.0-37, vlc).

2. The software does not support the **Wayland** desktop protocol, which is standard on Ubuntu 21.04 and above and requires X11 (xorg) protocol. When Wayland protocol is used, the software will not be able to capture a desktop image snapshot, student computers appear in the teacher console as "Waiting for screenshot" instead of a screen image, Broadcast Desktop and Control (Remote Desktop) tools do not work. For information on how to switch Wayland to X11 please see in [1], chapter **A**.

3. The Linux platform currently does not correctly support arbitrary screen resolution scaling multiples such as 1.3 or 0.7. Scaling multiples of 0.5 are supported: 1.0, 1.5, 2.0, etc. Incorrect scaling results in showing graphic elements of the program distorted: too large or too small.

4. Internet access restrictions use the third party DNS and DHCP server service **dnsmasq**. If you plan to use Internet access restrictions, we recommend that you configure **dnsmasq** after installing the user module, as described in **Chapter D** of the guide [1].

5. In contrast to the Windows version, the student module for Linux is always executed with privileges of the currently logged in user, and therefore technically can always be stopped with the command line utilities like **kill**. At the same time, the student module contains special mechanisms which prevent the user from stopping the student module through UI elements of the shell (menus and buttons), e.g. by clicking the Close button. Such mechanisms were tested in the standard Astra Linux and Ubuntu environments. Custom shell customizations, including custom desktop mods, widgets, plug-ins, etc., can again restore the ability to stop the application through the shell.

We also recommend setting up **the administrator password** in the student module settings (on the Security tab) to prevent stopping the service and access its settings from the student console.

6. Due to the student module always starts within the user login session, and therefore is unavailable on the login screen, you will not be able to log in users remotely with Net Control 2 software for Linux, as also to control the student computer remotely when the system is on the login screen. If you need to control student computers immediately after you turn them on, we recommend that you consider automatic login.

7. In the Control mode (Remote Desktop), when you need to switch the keyboard layout on the controlled (remote) computer, please make the switch only **on your computer** (the controlling computer), we recommend using the language selector on the taskbar rather than hot keys. Switching the keyboard layout on both the local and remote computers usually results in incorrect (double) transcoding of the entered text.

8. Due to the huge number of background processes running in Linux, application restrictions and management is applied only to the **installed desktop applications** that are available in the main menu (applications menu).

## II. The features that are currently unavailable in Net Control 2 for Linux, in comparison with Net Control 2 Classroom for Windows.

Below are listed the features and functions, which are not available currently in Net Control 2 for Linux. We plan to review this list periodically and to remove features as they will be added to the product. Other features not listed below that are available in the Windows version are assumed to be available in the Linux version also.

- Direct connections – connections that are created by the teacher in the teacher module directly, using the Connection password.
- **Workspace Manager** and **Import from CSV file** tools, which are connected with the direct connections mentioned above.
- Searching the network for available computers, import of the connections to the teacher console, using the Connection Password.
- **Self-registration**
- **Speech and Camera** tool
- **Co-Play** tool. Synchronous playback of multimedia materials on teacher and student computers.
- **Co-Browse** tool.
- Multi-monitor environment.

- Automatic updates.
- Remote update from the teacher module.
- **Control** tool: Ctrl+Alt+Del simulation.
- **Control** tool: screen annotations.
- **Control** tool: common clipboard.
- **Control** tool: moving the active window to the top-left.
- **Broadcast Desktop**: screen annotations.
- **Broadcast Desktop**: broadcast area selection.
- **Broadcast Desktop**: broadcast system audio and microphone audio to students.
- **Broadcast Desktop**: ability to allow students to control the shared screen.
- **Broadcast Desktop**: switching between the full-screen and windowed modes of the Broadcast Desktop Viewer window.
- **Bad Language** tool.
- Remote **Login**
- **Chat**: inserting screenshots to the chat.
- **DRR Screen Recording** except recording within Control/Remote Desktop sessions.
- **Event Logger** tool.
- Automatic **collection** of files
- Work in **Student groups**.