NRC



User Guide R330733



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1. WELCOME!

1.1 About the product

Introduction

Thank you for choosing the Barco Networked 4K Room Compositor (NRC) Client software (Barco part number: R330733 version 1.0).

The NRC Client software running on the client touch PC allows users to connect to the NRC Server software. It provides an intuitive touch-based graphical user interface that allows the user to:

- Detect and configure hardware devices (i.e. ClickShare Base Unit, NGS-D200, NGS-D220, NRC-200, etc...) and other miscellaneous settings;
- · Select the relevant content on-screen via the Sources view;
- Adjust the layout by selecting the desired layout from the Layouts view;
- Control the source audio volume and mute.

2. GETTING STARTED

2.1 Installing the NRC Client application

How to install

- Download the NRC Client GUI from the internet <u>www.barco.com/NRC_Client</u> on the tablet or your PC, using corporate WiFi. Execute NRC_1.0.6.9_Client_x64.exe.
- 2. Once installed, connect to the wireless network of the local Access Point.

2.2 Starting the NRC Client application

Starting the NRC Client application

The two methods of starting the NRC Client application are explained below.

Method one

In windows, go to Start > All Programs > Barco NRC > Client > NRC Client and single-press NRC Client.

Method two



Double-press NRC Client shortcut

on your desktop.

Depending on how your system is configured, NRC Client GUI opens like presented below.

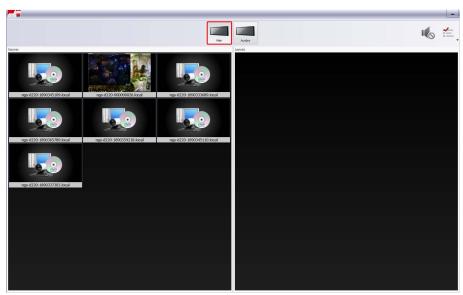


Image 2-1 NRC Client GUI: Main window



By default, the NRC Client application automatically connects to its configured compositor PC.



Following message appears on the bottom-right window of the NRC Client GUI, if the NRC Client application is unable to connect to its configured compositor PC.



Image 2-2 NRC Client is not connected to server



To stop the NRC Client application, single-press the NRC Client icon in the Windows system tray and select Exit from the context menu.



Image 2-3
Exiting the NRC Client application

3. NRC CLIENT GUI OVERVIEW

3.1 Introduction

Introduction

The NRC Client GUI is the main graphical user interface of the NRC solution. It provides an easy-to-use interface allowing you to perform various operations in a quick way. Using this GUI, you can perform the following tasks:

- Preview a source locally before showing it (moderation)
- · Launch the available source(s) on multiple composition windows
- · Activate an auto-layout
- Configure ClickShare Base Unit
- Connect to other compositor PCs
- · Set the administrator login mode
- · Create full system backup
- · Control audio of the source

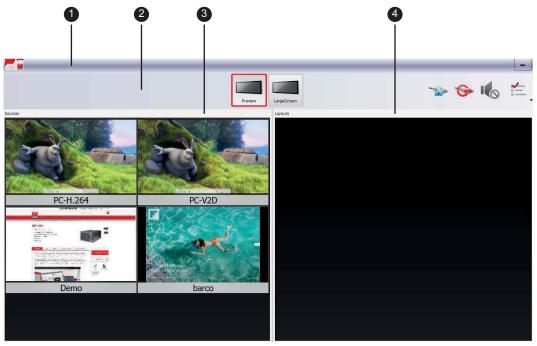


Image 3-1 NRC Client GUI (basic setup)

- 1 Header
- 2 Toolbar
- 3 Sources view
- 4 Layouts view

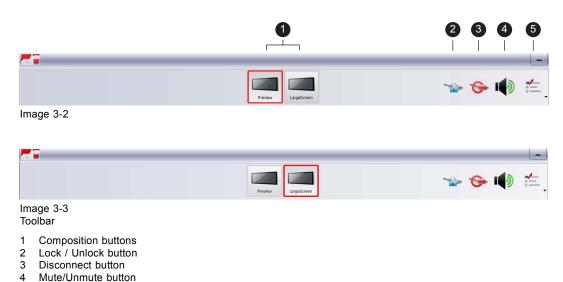
The header of this GUI shows the Barco logo, software name and minimize button. The minimize button is used to reduce the current NRC Client GUI into a taskbar button.

3.2 Toolbar

Introduction

The toolbar on the NRC Client GUI is a user friendly tool with on-screen buttons (or icons) to get direct access to the supported features. Depending on the configuration setup, following toolbar buttons (or icons) become available.

The following view of the toolbar appears if the main composition or the auxiliary composition (non data-sharing composition) is selected.



The function of each button displayed on each view of the toolbar is explained below.

Composition buttons (1)

Configure button

The composition buttons only appear when there is more than one composition configured in the system. Use these buttons to select the desired composition (= output) on the screen. The selected composition button is indicated by a red-color boundary on the toolbar.

Lock/Unlock button (2)

You are able to limit the available number of ClickShare sources. Use this button to lock the number of ClickShare sources, so that no new ClickShare sources can be added to the *Sources view*. Use this button to unlock and allow new ClickShare sources again.

Disconnect button (3)

Use this button to disconnect all available ClickShare sources at once. This provides a simple cleanup when different ClickShare sources are connected.

Mute/Unmute button (4)

Toggle button. Use this button to mute/unmute the audio of the displayed source(s) simultaneously. The button acts as a master and automatically activates whenever any source having audio is launched.

Button inactive

· Source audio mute

Source audio unmute

Configure button (5)

Use this button to access the Configure dialog of the NRC Client GUI.

3.3 Sources view

Introduction

The Sources view is a container for configured sources and ClickShare sources thumbnail view. It provides you an easy user interface to access the sources.

Depending both on how the source is configured and source content, the thumbnail view of configured sources shows the content on the NRC Client GUI. If there is no source content, the thumbnail view displays the default icon or an icon configured to that source.

Single-press the **source thumbnail view** to launch the according source content on the selected composition window. The source name (as given during the configuration) highlighted in grey-color label (when not active) is shown on the bottom of the thumbnail view.

The thumbnail view of ClickShare source appears inside the *Sources view* container as soon the ClickShare button is connected to the base unit. If the source is not displaying, the thumbnail view shows the default ClickShare icon. To display your ClickShare source on the composition window, press the **ClickShare button**. The displayed ClickShare source becomes available to other remote users and can be redistributed to other composition windows via NRC Client GUI, until it is removed by its owner by pressing the ClickShare button again or unplugging the ClickShare button (source content disappears approximately after 1 minute). The source name (highlighted in grey-color label) is the name of the user logged on to the source machine (e.g. laptop, mobile, tablet, etc...).

Use the navigation buttons on the Sources view to scroll up and down to the sources thumbnail view list.

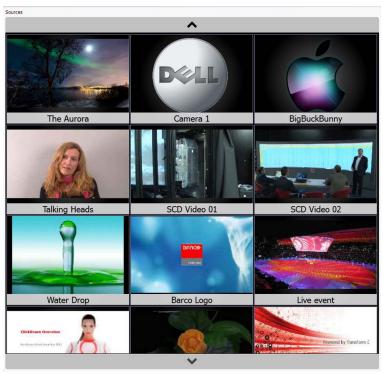


Image 3-4 Sources view

3.4 Layouts view

Introduction

The *Layouts view* is a container for system generated auto-layouts thumbnail view. The thumbnails view shows a preview of the generated layouts. Depending on the number of source(s) selected in the source view, the system automatically proposes different auto-layout(s) to the user – allowing flexibility to display the relevant content on the screen and to quickly change the way the sources are being shown. The arrangement of sources position and size within a layout is automatically done by the software.

To launch an auto-layout, single-press the according **layout thumbnail view** – the source(s) content displays on the selected composition window.

Use the navigation buttons on the *Layouts view* to scroll up and down in the auto-layout thumbnail view list.



Image 3-5 Layouts view

4. USING NRC CLIENT GUI

4.1 Selecting a composition window

Introduction

A composition is a container for sources content, which allows you to arrange and display sources into their connected output window (i.e. composition window). The output window of each composition has its own position and size relative to the screen.

How to select a composition window?

1. In the NRC Client GUI, navigate to the toolbar.



Image 4-1

Toolbar: composition selection

Select the desired composition window on the screen, by single-pressing the relevant Composition button on the toolbar.



Image 4-2

The selected composition is indicated by a red-color boundary on the NRC Client GUI. Simultaneously, the according composition window becomes active on the screen.

4.2 Launching a source

Introduction

The *Sources view* shows all configured sources and the connected ClickShare sources. Each of these sources can be shown in one or more composition windows (via the selected auto-layout in NRC Client GUI) on the screen. Depending on the number of source(s) selected, the system automatically arranges the source position and size within the auto-layout.

To display the configured source content on the composition window, press the corresponding source thumbnail view in the *Sources view*.

To display the ClickShare source content on the composition window, the user need to single-press the **ClickShare button**.

The sources can contain audio. To broadcast the audio of the source(s), external speakers must be attached to the compositor (server) PC.

How to launch a configured source via NRC Client GUI?

- 1. In the NRC Client GUI, navigate to the Sources view.
- 2. Display the selected source content on the composition window by doing either of the followings:

- **Short-press** the source **thumbnail view** to display the source content together with the other source contents (if currently displaying any) on the composition window.
- **Long-press** the source **thumbnail view** to display the source content on full composition window replacing the other source contents (if currently displaying any).

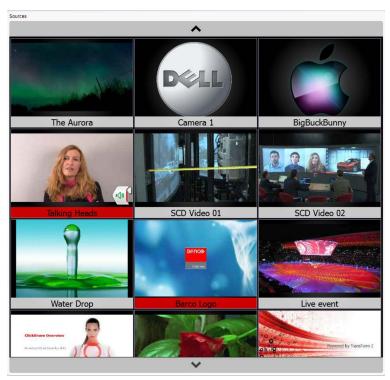


Image 4-3 Sources view: Selecting the source(s)

Note: The displayed source name is highlighted by red-color label in its thumbnail view. If the source audio is configured, an audio control button appears on the source thumbnail view for audio volume control and muting of the source audio.

The selected source content is added and displayed within the auto-layout(s) and on the composition window.



Image 4-4 Source content within an auto-layout

How to launch a ClickShare source?

There are two ways to launch a ClickShare source, depending on the moderation status:

- Moderation disabled
- Moderation enabled

Moderation disabled

- 1. Insert the ClickShare button into a USB port of your source machine (e.g. laptop, mobile, tablet, etc...).
- 2. Press the ClickShare button:
 - **Short-press** the **ClickShare button** to display the ClickShare source content together with the other source contents (if currently displaying any) on the composition window.
 - **Long-press** the **ClickShare button** to display the ClickShare source content on full composition window replacing the other source contents (if currently displaying any).

The ClickShare source becomes available in the layout view.

The displayed ClickShare source now becomes available to other remote users and can be redistributed to other composition windows via the NRC Client GUI.

It remains available until it is removed by its owner by pressing the **ClickShare button** again or unplugging the **ClickShare button** (source content disappears approximately after 1 minute).

A ClickShare source can also be disconnected by disabling/hiding the ClickShare source on all composition windows.



The displayed ClickShare source name is highlighted by red-color label in its thumbnail view. If the source audio is enabled, an audio control button appears on the source thumbnail view for audio volume control and muting of the ClickShare source audio.



Optional: The other remote users can follow the "Launching a configured source via NRC Client GUI" procedure to launch the displayed ClickShare source.

Moderation enabled

- 1. Insert the ClickShare button into a USB port of your source machine (e.g. laptop, mobile, tablet, etc...).
- 2. Make sure the **Lock/Unlock button** on the NRC Client GUI toolbar is in the "unlocked" state, otherwise no ClickShare button will be able to connect.
- Press the ClickShare button.

The ClickShare source becomes available in the Sources view.

4. Select the ClickShare source in the Sources view.

The ClickShare source becomes available in the composition window

Tip: The ClickShare source remains available until the **Disconnect button** on the NRC Client GUI toolbar is pressed, or until the ClickShare dongle is removed by its owner by pressing the **ClickShare button** (this last part is the same as when moderation is disabled).

4.3 Hiding a displayed source

How to hide displayed source via NRC Client GUI?

- 1. In the NRC Client GUI, navigate to the Sources view.
- Press the thumbnail view of the displayed source whose content you want to remove from the composition window.

How to hide ClickShare source?

Remove the ClickShare source content from the composition window by doing either of the followings:

- Press the ClickShare button again;
- Unplug the ClickShare button from source machine;
- Press the thumbnail view of the ClickShare source on the NRC Client GUI



The inactive source name is highlighted in grey-color label in its thumbnail view.

4.4 Activating a layout

Introduction

A layout is an arrangement of source(s) on a composition window. Multiple auto-layouts can be used for different views of source(s) on a composition window.

The auto-layout is only available if at least one source is selected in the Sources view.

How to activate a layout?

- 1. In the NRC Client GUI, navigate to the *Layouts view*.
- 2. Single-press the desired layout thumbnail view.



Image 4-5

Layouts view: Selecting an auto-layout

Note: By default, the first auto generated layout (i.e. Auto Layout 1) is always activated on the selection of a source.

Note: The active auto-layout is highlighted by red-color label in its thumbnail view.

The selected auto-layout is loaded on the selected composition window replacing a possibly former

Controlling the source audio 4.5

Introduction

Using this feature the audio of configured sources and ClickShare sources can be controlled.

How to control the audio of a source?

- 1. In the Sources view, navigate to the thumbnail view of the launched source whose audio streaming you want to control.
- 2. Single-press the audio control button





Image 4-6 Audio button on a source thumbnail view

An audio control widget opens. If not used for few seconds, the audio control widget disappears automatically.



Image 4-7

3. Control the launched source audio by doing followings;

- move the green slider bar up to increase the volume;



Image 4-8 Increasing the volume

- move the green slider bar down to decrease the volume;

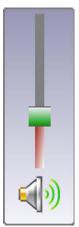


Image 4-9 Decreasing the volume



- single-press the loudspeaker logo

in the audio control widget to mute the source audio;



Image 4-10 Source audio muted

- single-press the crossed out loudspeaker logo source audio.



in the audio control widget to unmute the



Image 4-11 Source audio unmuted

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5. CONFIGURING NRC CLIENT GUI SETTINGS

5.1 The Configuration Wizard

5.1.1 Start the Configuration Wizard

How to start the Configuration Wizard

1. On the NRC Client GUI toolbar, press the Configure button and select Wizard:



The Welcome page opens.

5.1.2 Room compositor configuration

How to configure the NRC Client GUI?

1. Press **Start Configuration**. The *General Settings* page opens.

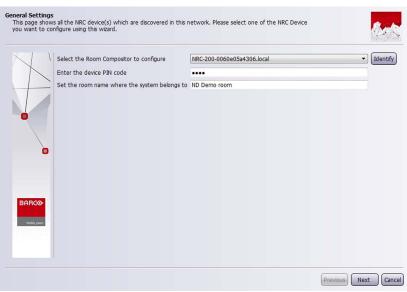


Image 5-1 General settings page

Press Identify and select the Room Compositor to configure.
 Identify is used to check if you have selected the correct NRC. A text message will appear on the video outputs of the selected NRC.
 Enter the PIN code.

The default PIN code is "1234".

It can be changed in the Administrator Settings (see image 5-31).

Set the room name.

This is used in the ClickShare environment.

Press Next.

The Output Settings page opens.

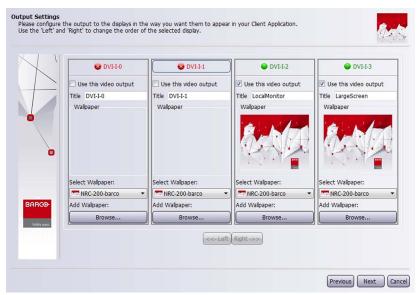


Image 5-2 Output settings page

Select the video outputs you need from the connected outputs (marked green).
 Use the Left and Right buttons to change the order of the selected display.
 Press Next.

The Source Settings page opens.

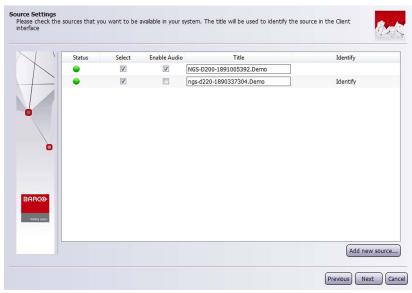


Image 5-3 Source settings page

Any NGS-D200 or NGS-D220 will automatically be detected if available in the same LAN:

- Available sources are marked **green** (red marked sources are not available).
- Select the sources you want to be added into the Sources view.
- Enable Audio for the sources you want to hear.
- Title: enter the source name you want to see in the Sources view.

4. If you want to select other camera types (IP cameras or other IP video streams), press **Add new source...**, the following pop—up opens:



Image 5-4 Add new source

- Source type: select RTSP.
- Name: Enter a name for the new source, you will see this name later in the Sources view.
- URL: Fill in the URL of the webstream.
- Enable Audio: Select or deselect.

Press Add.

After adding the new sources will become available in the Sources and can be selected in the Source Settings page.

Press Next.

The ClickShare Settings page opens.

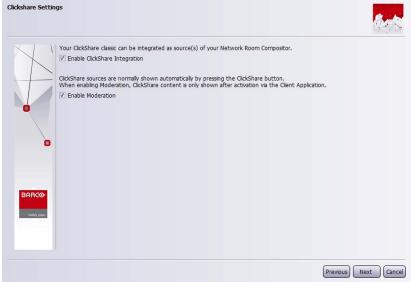


Image 5-5 ClickShare settings page

Select Enable ClickShare Integration if you would like to add ClickShare sources.
 Select Enable Moderation if you would like to preview sources locally before showing them.
 Press Next.

The Finish Configuration page opens.

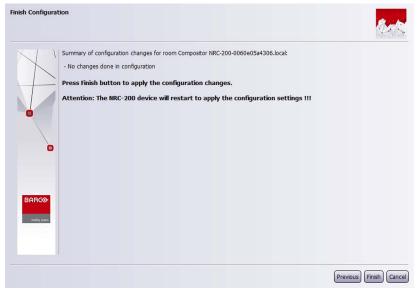


Image 5-6 Finish configuration

Review your modifications and if OK, press Finish
 The configuration is completed.
 The NRC will restart automatically.

5.2 The Settings dialog

5.2.1 Start the Settings dialog

How to start the Settings dialog

1. On the NRC Client GUI toolbar, press the Configure button and select Settings



The Settings Authentication page opens:



Image 5-7
Settings Authentication page

Enter the PIN code and press OK.

The default PIN code is "1234".

The Configuration dialog opens.

5.2.2 Touch Panel Settings

Introduction

The *Touch Panel Settings* page allows you to connect to the other compositor (i.e. NRC Server) PC's connected to the same NRC private LAN, manipulates thumbnail view size of sources and layouts and enables/disables the screen saver setting of Client PC.

Press Touch Panel on the left pane in the Configure dialog to open the Touch Panel Settings page



Image 5-8 Touch Panel Settings page

Connecting to the compositor PC through ClickShare Base Unit WiFi

1. Tick Connect to Server through ClickShare Base Unit WiFi checkbox. See label 1.



Image 5-9

Connecting to compositor PC through WiFi

Automatically, the IP address changed to 192.168.1.1 in the IP address/Hostname text box and also greyed out (i.e. cannot be edited further).

By default, through this option the client will always connect to the IP address 198.168.1.1.

2. Press Apply & Close. See label 2.

3. Enter the ClickShare Base Unit SSID and password and press **Connect**. See labels 3, 4 and 5 respectively.



Image 5-10 Entering the WiFi credentials

Tick Show characters checkbox to display the characters entered for password.



Following warning message appears on the bottom-right window of the NRC Client GUI, if NRC Client PC unable to connect to the compositor PC via ClickShare Base Unit WiFi. In such case, press Change WiFi Settings... (which become enabled due to this) on the Touch Panel Settings page and configure the ClickShare Base Unit WiFi settings – see page 31.



Image 5-11 Warning: Unable to connect via WiFi

Connecting to other compositor PC

- 1. In the Touch Panel Settings page, navigate to the section Compositor connection.
- 2. Enter the IP address or Hostname of the compositor PC you want to connect. See label 1.



Image 5-12 Connecting to a compositor PC

3. Press Apply & Close. See label 2.

Manipulating the thumbnail size of sources and layout

- 1. In the Touch Panel Settings page, navigate to the section Thumbnail size for Sources and Layouts.
- 2. Hold and move the slide bar to adjust the thumbnail view size.
 - move left to decrease the size;
 - move right to increase the size.

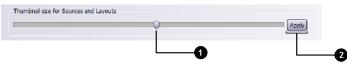


Image 5-13 Manipulating thumbnail view size

3. Press Apply.

The thumbnail view size of the sources and layouts adjust equally and simultaneously..

5.2.3 General Settings

What can be done?

The General Settings page allows you to change the meeting room name and location.

Press General on the left pane in the Configure dialog to open the General Settings page.



Image 5-14 General Settings page

Changing the meeting room name and location



Image 5-15

Changing the meeting room and location

- 1. Enter the new meeting room name. See label 1.
- 2. Enter the location of the new meeting room. See label 2.
- 3. Press **Apply** to confirm the changes. See label 3.

Changing the log settings

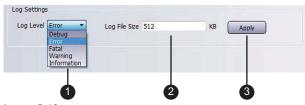


Image 5-16

Changing the log settings

- 1. Select the preferred log level form the drop down box. See label 1.
- 2. Enter the available log file size. See label 2.
- 3. Press Apply to confirm the changes. See label 3.

5.2.4 Compositors Settings

Introduction

The Compositors Settings page allows you to change the compositor icons order, upload a predefined or personalized icon for the compositor, upload a predefined or personalized wallpaper for the compositor window, show/hides the button to minimize and maximize the compositor window and adjust the compositor PC screen saver settings.

Press Compositors on the left pane in the Configure dialog to open the Compositors Settings page.



Image 5-17

Compositors Settings page

Changing the compositor order

1. In the Compositor Settings page, select a compositor whose order you want to change.



Image 5-18 Selecting a compositor

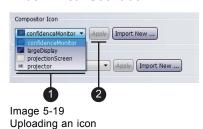
The selected compositor icon background color turns blue and appears to be virtually pressed.

- 2. Change the compositor order on GUI by doing following:
 - press shiftLeft to move the selected compositor by one place in left direction;
 - press shift Right to move the selected compositor by one place in right direction.

Uploading a predefined icon for the compositor

- 1. In the *Compositor Settings* page, select a compositor whose icon you want to change.

 The selected compositor icon background color turns blue and appears to be virtually pressed.
- 2. Navigate to the *Compositor Icon* section and select one of the available predefined icons from the drop-down list. See *label 1*.



3. Press Apply. See label 2.

Uploading a personalized icon for the compositor

- In the Compositor Settings page, select a compositor whose icon you want to change.
 The selected compositor icon background color turns blue and appears to be virtually pressed.
- 2. Navigate to the Compositor Icon section and press Import New.... See label 1.

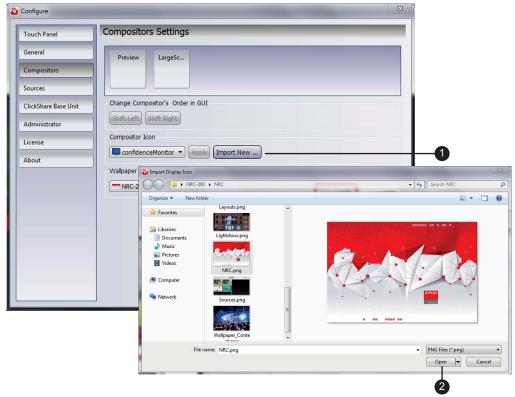


Image 5-20 Uploading a personalized icon

- 3. Select the desired file and press **Open**. *See label 2*. The uploaded file is appended as new icon in the compositor icon drop-down list. **Note:** The upload file should be a PNG format.
- 4. Now follow the uploading a predefined icon procedure to activate the personalized icon.

Uploading a predefined wallpaper for the compositor

- In the Compositor Settings page, select a compositor whose icon you want to change.
 The selected compositor icon background color turns blue and appears to be virtually pressed.
- 2. Navigate to the *Wallpaper* section and select one of the available predefined wallpapers from the dropdown list. See label 1.

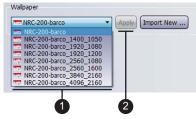


Image 5-21 Uploading a wallpaper

3. Press Apply.

Note: The selected wallpaper automatically resized to fit the aspect ratio of the compositor window on NRC Server software startup.

Uploading a personalized wallpaper for the compositor

- In the Compositor Settings page, select a compositor whose icon you want to change.
 The selected compositor icon background color turns blue and appears to be virtually pressed.
- 2. Navigate to the Wallpaper section and press Import New.... See label 1.

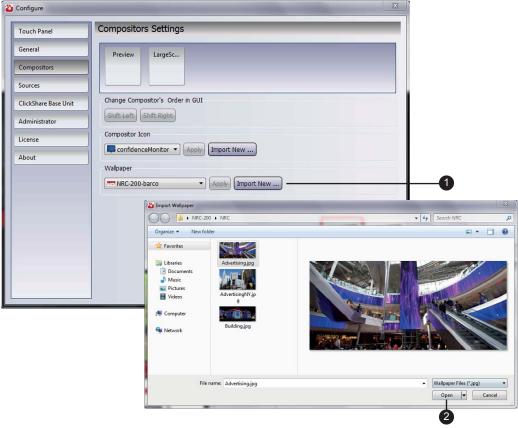


Image 5-22 Uploading a personalized wallpaper

3. Select the desired file and press Open. See label 2.

The uploaded file is appended as a new wallpaper in the wallpaper drop-down list.

Note: The upload file should be a JPEG format and must have the same native resolution of the corresponding compositor.

Note: The selected wallpaper automatically resized to fit the aspect ratio of the compositor window on NRC Server software startup.

4. Now follow the uploading a predefined wallpaper procedure to activate the personalized wallpaper.

5.2.5 Sources Settings

Introductions

The *Sources Settings* page allows you to enables/disables rendering the source content on the thumbnail view, upload a predefined or personalized icon for the source.

Press Sources on the left pane in the Configure dialog to open the Sources Settings page.



Image 5-23 Sources Settings page

Enable Preview Thumbnail: If ticked, the thumbnail view in the source view shows the content of the added source, else the icon selected for the respective source (i.e. static image) is displayed.

Uploading a predefined icon

1. In Source Settings page, select a source from the drop-down list whose icon you want to change. See label 1.

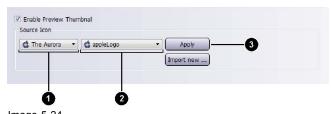


Image 5-24 Uploading an icon

- 2. Select one of the available icons from the drop-down list. See label 2.
- 3. Press Apply. See label 3.

Uploading a personalized icon

1. In Source Settings page, select a source from the drop-down list whose icon you want to change. See label 1.



Image 5-25 Uploading a personalized icon

- 2. Press Import New.... See label 2.
- 3. Select a desired file and press **Open**. See label 3. **Note:** The upload file should be a PNG format.
- 4. Now follow the uploading a predefined icon procedure to activate the personalized icon.

5.2.6 ClickShare Base Unit Settings

Introduction

The *ClickShare Base Unit Settings* page allows you to configure your ClickShare Base Unit connected to the compositor PC.

Press **ClickShare Base Unit** on the left pane in the *Configure* dialog to open the *ClickShare Base Unit Settings* page.



Image 5-26 ClickShare Base Unit Settings page

Viewing the ClickShare Base Unit firmware version number

Navigate to the section System Information and view the firmware version number.



Image 5-27 Viewing the firmware version number

Configuring the Basic settings



Make sure not to change the default IP Address and Administrator password in the section Basic settings.



Image 5-28 Configuring the basic settings

Enable audio functionality: enables/disables (ticked/unticked) the captured audio on the Base Unit.

Press Apply to confirm the changes.

Configuring the Wifi settings

1. In the ClickShare Base Unit Settings page, navigate to the section WiFi settings.

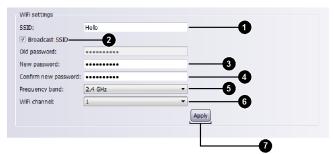


Image 5-29 Configuring the WiFi settings

2. Enter a public name (SSID) for the wireless network. See label 1.

Note: The default SSID is ClickShare <serial base number>

Tip: Pair the ClickShare buttons again to save any change to the SSID.

3. If you want to broadcast this SSID, tick the *Broadcast SSID* checkbox. See *label 2*. *Tip: Pair the ClickShare buttons again to save any change to the SSID.*

4. Enter a new password and confirm that password. See labels 3 and 4.

Tip: Pair the ClickShare buttons again to save any change to the password.

5. Select the wireless connection frequency band: 2.4 GHz or 5 GHz from the *Frequency band* drop-down list. *See label 5*.

Note: Make sure your PC's wireless interface supports the 5 GHz band before selecting it on the Base Unit.

- 6. Select the desired wireless connection channel from the WiFi channel drop-down list. See label 6.

 Note: The channels available in the list vary according to the regional version of your Base Unit. You do not need to pair the ClickShare buttons again when changing the frequency band or wireless connection channel.
- 7. Press Apply to confirm the changes. See label 7.

5.2.7 Administrator Settings

Introduction

This *Administrator Settings* page allows you to define the login (i.e. Administrator) mode for the user to access the NRC Client settings page. Furthermore, it allows you to change the PIN code.

Press Administrator on the left pane in the Configure dialog to open the Administrator Settings page.



Image 5-30 Administrator Settings page

Changing the PIN code

Press Change Administrator PIN code.... See label 1.
 If set, only the authorized user's who knows the secret PIN Code can access the NRC Client GUI settings page.

The Change PIN code dialog opens.

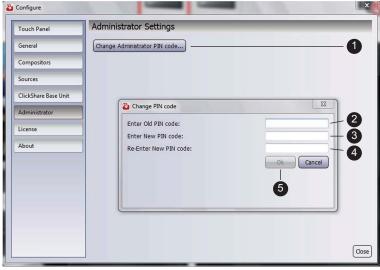


Image 5-31 Changing the PIN code

- 2. Change the PIN code by doing followings:
 - a) Enter Old PIN: enter the old PIN code. See label 2;
 - b) Enter New PIN: enter the new PIN code. See label 3;
 - c) Re-Enter New PIN: re-enter the new PIN code. See label 4;
 - d) press **OK** to change the PIN code and close the dialog. See label 5.

5.2.8 License Settings

Introduction

From the *License Settings* page, you can import a license file required after the NRC Server software installation or after the license file has been expired.

Press License on the left pane in the Configure dialog to open the License Settings page.



Image 5-32 License Settings page

How to import the license file?

- 1. Insert the USB stick in the USB slot on the compositor PC where NRC Server software is running.
- 2. Login to your touchscreen PC or tablet PC.
- 3. From the NRC Client GUI, press the setting button.
- 4. Open the Configure dialog by entering the secret PIN code or yours window credentials.
- 5. Press Import license file... in the License Settings page. See label 1.

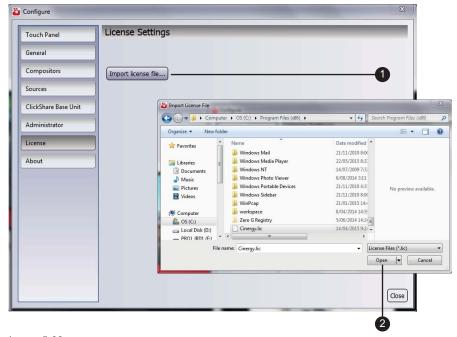


Image 5-33 Importing a license file

- 6. Select the license file on the USB stick and press Open. See label 2.
- 7. Press **OK** and restart the NRC Server software.

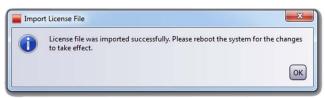


Image 5-34 License file is imported

5.2.9 About

Introduction

The *About* page displays some general information about the display system, software versions, module version and build date.



Image 5-35 About

6. WEB INTERFACE FOR THE NRC

6.1 Pre-configured network settings

Default network settings

After the installation of the NRC software, the unit is pre-configured with a default IP address and DHCP with zero configuration fallback:

Eth0: DHCP with zeroconf fallbackEth1: 192.168.1.1 255.255.255.0



WARNING: The IP addresses 192.168.1.x and 192.168.2.x are not allowed for the DHCP network. These are reserved for the ClickShare interface.

6.2 Starting the web interface



NRC web interface

The web interface provides access to the configuration and operating parameters of the NRC.

Home

To start the web interface:

1. On your PC, open a web browser.

The web interface runs in a standard web browser. it can be accessed from any PC within the video network.

2. Enter the hostname.local of the NRC into the address bar of the browser.

The default hostname has this format: NRC-200-<mac-address>.

The browser will display the web interface.

Example browser URL: NRC-200-0060e05e201c.local

Start up modes

When the web interface has started, its home page can be seen. On the left hand side there is a navigation-menu, which provides access to the different kind of settings. Each section can be accessed on an individual page.

The web interface can be used in two different modes:

- User mode
- · Administrator mode



Network Room Controller v1.0.3-1

- Home
- · Configuration backup
 - Logs
 - ▶ Settings
- Change password



Network Room Controller v1.0.3-1

- Home
- System Settings
 - Network configuration
 - Resolve configuration
 - NTP settings
 - System access
 - Change log level
- ▶ Upgrade System
- Configuration backup
- Logs▶ Settings
- Change password

Image 6-1

Left: User mode, Right: Administrator mode

Depending on this mode, the menu as well as the possibility to configure settings on the respective pages differs. You can switch to another mode by logging in or out.

The authentication system of the NRC uses Pluggable Authentication Modules (PAM). As such, any authentication system that can be integrated in PAM can be used and configured.

Functionality is provided based on membership of two local groups:

- Level100: members of this group are allowed to modify both system settings and functional settings. User account: Administrator mode.
- Level200: members of this group are allowed to modify functional settings only.
 User account: User mode (= operator mode)

System settings are the settings of the machine itself, such as: NTP, network configuration, etc..

By default, the NRC provides two user accounts (Administrator and User).

New users can be added to the system (either locally or e.g. by integrating network based accounts). By adding these accounts to the groups level100 (system) or level200 (functional), they will be given the matching permissions.

6.3 How to log in

Standard mode

You can work in this mode without log in, you are not allowed to change any settings.



Changing the Functional settings is not possible in the standard mode. To change these settings login to user mode or administrator mode.

User log in

As a Barco user, you are allowed to change the host name only.

- Use the link <u>Log in</u> at the right top corner of the screen
- · Your login and password needed here are:

Login: barco

Password: b4rc0,BCD

Administrator log in

As an administrator, you are allowed to change the underlying operating system.

- Use the link <u>Log in</u> at the right top corner of the screen
- · Your login and password needed here are:

Login: admin

Password: b4rc0,BCD

6.4 Web interface — System settings

Log in

Log in as administrator (see previous paragraph) to view or change any of the system settings.

6.4.1 System settings — Network configuration



There are two tabs for Network configuration: Interface eth0 and Interface eth1.

Network configuration for Interface eth0

1. Select System settings — Network configuration and the following page appears:

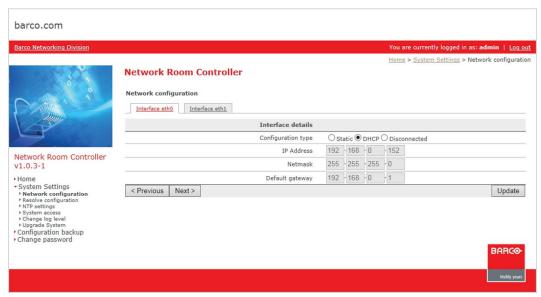


Image 6-2

Network configuration — Interface eth0 — using DHCP page

- Configuration type

Static: When Static is enabled, you can manually change the IP address as shown in the image above.

DHCP: When *DHCP* is enabled, an IP address will be automatically allocated to the unit. *Disconnected*: When *Disconnected* is enabled, the network interface is disabled.

- **IP address**, **Netmask** and **Default gateway**Fill in each of these lines when *Static* is enabled.
- 2. After the IP settings are changed, press **Update** on the right hand side.

Network configuration for Interface eth1

1. Select the tab *Interface eth1* and the following page appears:

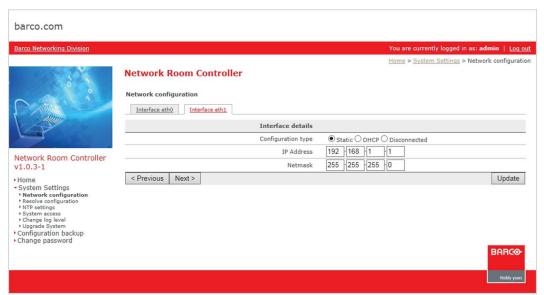


Image 6-3

Network configuration — Interface eth1— using Static page

This is similar to the settings on tab *Interface eth0*, see previous paragraph for eth0.



This *interface eth1* is for future use. Configuring this second interface requires detailed routing configuration and further expert system configuration.

6.4.2 System settings — Resolve configuration

Resolve configuration

1. Select System settings — Resolve configuration and the following page appears:

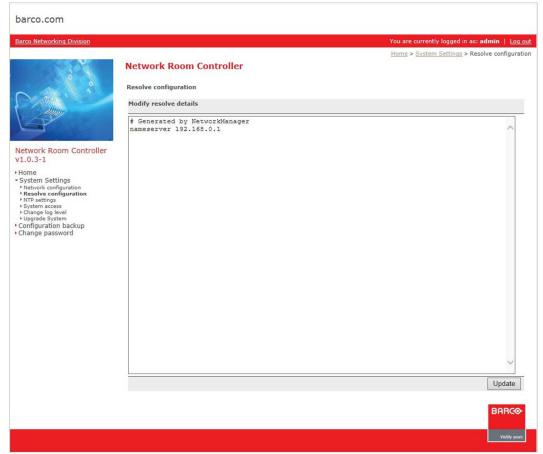


Image 6-4 Resolve configuration

On this page the DNS server can be adapted:

- 2. Write: "nameserver <IP-address DNS server>" on the page.
- 3. Press **Update** to change the configuration.



When DHCP is used, this can be updated via DHCP.

6.4.3 System settings — NTP settings

NTP settings

1. Select System settings — NTP settings and the following page appears:

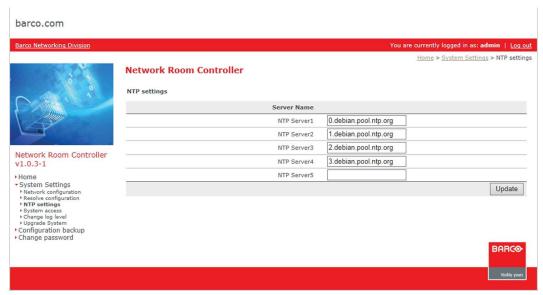


Image 6-5 Use NRC as NTP client

- Fill in the NTP server list
 Example: NTP Server1: 10.0.0.24, NTP Server2: 150.158.252.51.
 You can also use the name of the NTP server(s) when a nameserver is configured in System settings
 — Resolve configuration.
- 3. Press **Update** to save the new server list.

6.4.4 System settings — System access

System access

1. Select System settings — System access and the following page appears:

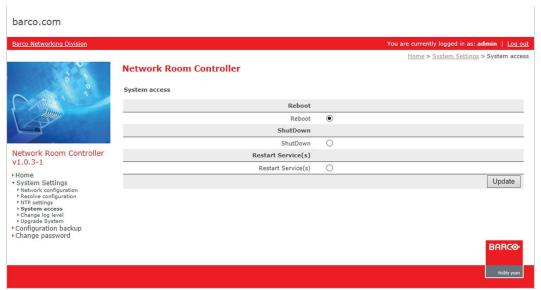


Image 6-6 System access page

2. Enable reboot, shutdown or restart services of the device:

- Reboot
 - Select if the device has to reboot
- Shutdown

Select if the device has to shutdown

- Restart service(s)
 - Select if the device has to restart services
- 3. Press **Update** to start the action.

6.4.5 System settings — Change log level

Change log level

1. Select System settings — Change log level and the following page appears:

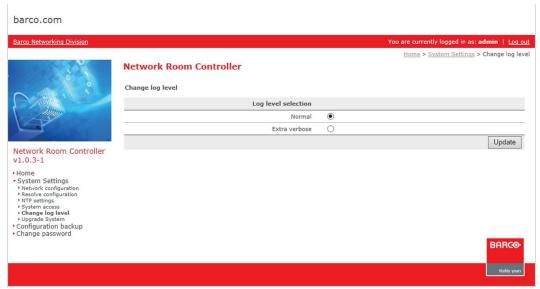


Image 6-7 Change log level page

- 2. Select the log level your prefer:
 - Normal
 - Extra verbose

Press Update to confirm.

6.4.6 System settings — Upgrade system

Upgrade system

1. Select System settings — Upgrade system and the following page appears:



Image 6-8 Upgrade system

2. Insert a USB drive or disc containing the proper ISO into the tray and press **Upgrade** to start the upgrade.



Remove the USB drive or disc before reboot.

6.5 Web interface — Configuration backup

Log in

You need to be logged in as administrator to view the configuration backup or change its settings, see "How to log in", page 40, Administrator log in.

6.5.1 Configuration backup — Logs

Logs

1. Select Configuration backup — Logs and the following page appears:



Image 6-9 Configuration backup — Logs

When you click on **Click here to take the backup of log files**, a backup/archive of the system's log files will be created.

A new tar.gz file will appear in the "Files list".

- 2. To download such a *tar.gz* file: select the desired archive and press **Download**. The archive will contain all the files that are located in /var/log/
- 3. To clean up the log files: click on Click here to do a CLEANUP of all log files (not the backups listed below).

Only the current log files will be deleted, not the tar.gz files.

6.5.2 Configuration backup — Settings

Settings

1. Select Configuration backup — Settings and the following page appears:



Image 6-10 Configuration backup — Settings

When you click on **Click here to take the backup of setting files**, a backup/archive of the system's setting files will be created.

A new tar.gz file will appear in the "Files list".

2. To download such a *tar.gz* file: select the desired archive and press **Download**. The archive will contain all the files that are located in <u>/etc/</u>

6.6 Web interface — Change password

6.6.1 Change password in User mode

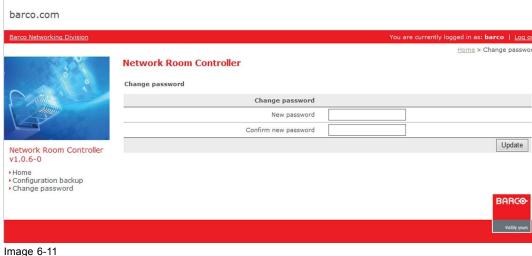
User Access

You need to be logged in as Barco user to change the password in Barco mode:

Log in as Barco user, see "How to log in", page 40, Barco log in.

Password change

1. Select Change password and the following page appears:



Change password _ user mode

- Create a **new password**:
 Insert the new password for the current login.
- Confirm new password:
 Repeat the new password for the current login.
- 2. Press Update to change the password.

6.6.2 Change password in administrator mode

Administrator Access

You need to be logged in as administrator to change the password in administrator mode: Log in as administrator, see "How to log in", page 40, Administrator log in.

Password change

1. Select Change password and the following page appears:

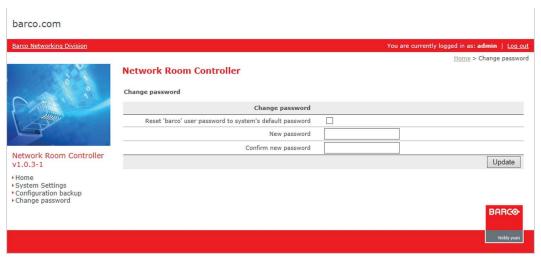


Image 6-12 Change password _ administrator mode

You may enable **Reset 'barco' user password to system's default password** to reset the password of the Barco account to its default.

Or, you may

- Create a **new password**:
 Insert the new password for the current login.
- **Confirm new password**: Repeat the new password for the current login.
- 2. Press **Update** to change the password.

7. IMPORTANT INFORMATION

7.1 Legal disclaimer

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A. NRC CLIENT API

Overview

Introduction

A.1 Introduction

Introduction

The NRC Client API allows the user to remotely control the NRC system via sending the API commands (i.e. XML commands) to the NRC Server software. The NRC API not only provides you all functionality currently available in NRC Client GUI plus even more functionality.

The API commands can be sent only after the connection is established between NRC Server software and NRC API and that the client is authenticated by the NRC Server software.

To know about the functionality available via NRC API and how to send the API commands, see the NRC API manual K5903126.

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B. WINDOWS 8 SETTING

Overview

- Windows 8 boot straight to the desktop
- Setting network connection priority

B.1 Windows 8 boot straight to the desktop

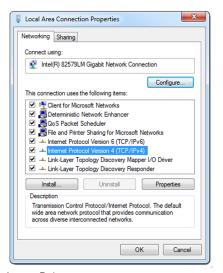
How to make Windows 8 boot straight to desktop on starts up?

- 1. Search for Schedule tasks in Windows 8 start menu by doing following:
 - a) press the Windows key (on keyboard or virtual keyboard);
 - b) type Schedule in the Search panel;
 - c) press Settings
 - d) press Schedule tasks.
- 2. In the appearing Task Scheduler dialog, press Create Task in the Action Panel.
- 3. In the appearing *Create Task* dialog do the followings:
 - a) type Show Desktop@Start in the Name text box.
 - b) select Windows from the Configure for drop-down list.
- 4. In the *Create Task* dialog, press the tab **Triggers** and then press **New...** at the bottom in the Triggers page.
- 5. In the appearing New Trigger dialog, select At log on from Begin the task drop-down list.
 - The New Trigger page refreshes and display the settings for the At log on option. Do not change the default settings on this page.
- 6. In the *Create Task* dialog, press the tab **Actions** and then press **New...** at the bottom in the Actions page.
- 7. In the appearing New Action dialog, do the followings:
 - a) type C:\Windows\Explorer.exe in the Program/script text box;
 - b) press **OK**.
- 8. In the *Create Task* dialog, press the tab **Conditions** and in the Power section, clear the *Start the task* on if the computer is on AC power check box.
- 9. Press **OK** to complete the Windows 8 boot straight to desktop procedure.
- 10.Reboot the system Windows 8 boot straight to the desktop.

B.2 Setting network connection priority

How to set the network connection priority in windows 8?

- 1. Open the Network Connections window.
- 2. Right click on your Local Area Connection (LAN) or Wireless (WiFi) Network Connection and select properties to open up the properties window of it
- In the Local Area Connection or Wireless Network Connection properties window, double-click Internet Protocol Version 4 (TCP/IPv4).



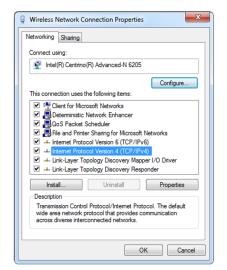


Image B-1 LAN: Internet Protocol Version 4 (TCP/IPv4)

Image B-2 WiFi: Internet Protocol Version 4 (TCP/IPv4)

4. In the Internet Protocol Version 4 (TCP/IPv4) window, single-click Advanced....



Image B-3 Opening the advanced setting

5. In the Advanced TCP/IP Settings window do the followings:

a) Untick Automatic metric checkbox;

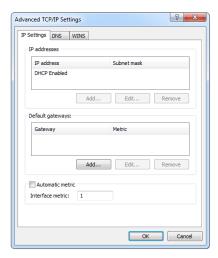


Image B-4 Setting the network connection priority

- b) In the Interface metric textbox, set the priority of the selected network connection as desired;
- c) Click **OK** to finish the network connection priority setting.

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C. MOBILE DEVICE SUPPORT

Overview

· Supported Apps

C.1 Supported Apps

Overview

The below list of Apps are supported by ClickShare and can be installed on your mobile device from Google Play or Apple App Store.

Before you can use your mobile device with ClickShare, you have to connect the mobile device Wi-Fi with the ClickShare Base Unit Wi-Fi. Follow the instructions as given in your mobile device user guide.

Арр	Used on	Logo
ClickShare Presenter	Android and iOS	
Airplay	Apple TV, iPhone, iPod touch, iPad	AirPlay