

LYNX | Centraal™

LynxCentraal

5000 Series
Quick-Start Guide

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Disclaimer

Lynx Redundancy

Attention: LynxCentraal contains an enhanced redundancy management engine for synchronizing operator account information, custom patterns (for greenMachine Testor), custom control panels and other data between all workstations in the LYNX universe. Since there was no such redundancy and advanced user management in the 5000 series in the past, the changeover is relatively simple. Existing users can be integrated directly into the new GUI and if a server with enhanced redundancy management is present in the system, the data is automatically stored in the server and distributed to all clients. Otherwise, it will be stored locally on the PC where LynxCentraal is used.

Adding a server with enhanced redundancy management will be possible at any time. Once such a server is present in the system, all local stored data can be merged with the server.

Overview

LynxCentraal is the unified front end for all Lynx Technik's hardware products, including the popular greenMachine, 5000 series and yellobrik product lines.

LynxCentraal succeeds and replaces the separate front-end applications greenGUI and APPolo. yelloGUI will stay as a separate Front-End für yellobriks.

Basic features

- Control and monitor yellobrik, greenMachine, and Series 5000 devices
- Set user-specific rights to limit access to devices
- Create custom controls for users to quickly change settings in your environment

LynxCentraal contains an enhanced redundancy management engine for synchronizing operator account information, custom patterns for greenMachine Testor, custom control panels and other data between all workstations in the LYNX universe. This redundancy management engine is not backward compatible with the existing redundancy management of legacy greenMachine software releases. Files designated for redundant storage will not be shared with those devices. The affected features are usable on those devices with restrictions only.

System Requirements

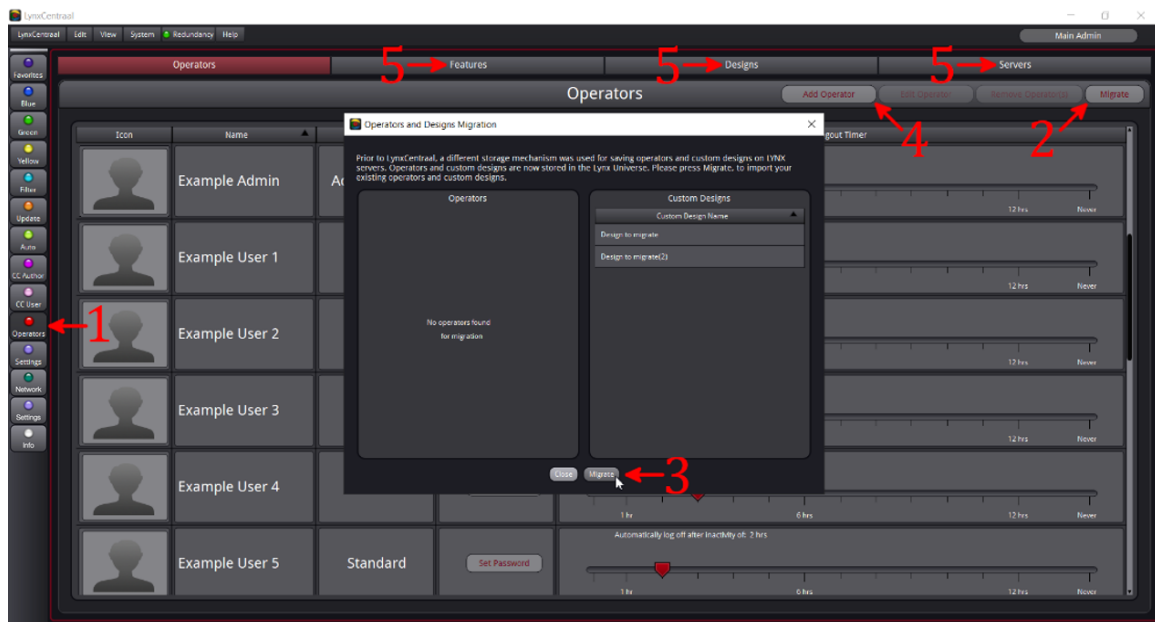
LynxCentraal is designed to run on a Windows-compatible PC or a Mac. The supported Windows platforms are Windows 7, Windows 8 and Windows 10 (recommended). The supported Mac versions are High Sierra, Catalina and Big Sur.

System Requirements	Minimum	Recommended
CPU	Core-2 CPU 1.6GHz	Quad Core CPU 2.5GHz
RAM	4 GB	8 GB
Free HDD space	1 GB	1 GB
Graphics	1280x960	1920x1080

Getting Started

Download the LynxCentraal Control GUI from www.lynx-technik.com, to setup and configure a LYNX system from a PC. The LynxCentraal GUI can be disconnected after the system has been configured (because all settings of all devices are automatically stored in the module's flash RAM). Alternatively, the LynxCentraal GUI can stay connected permanently for monitoring and real time status updates from the system.

- Install LynxCentraal on a PC in the same network as your devices.
- Start the application.
- Login as **Main Admin** with the default password **1main\$admin** (the Main Admin password is NOT editable!)



- Select the Operator Feature Page ([item 1](#)).
- Migrate existing users and designs ([click item 2](#)). It is best to do this first, rather than waiting until new operators have been added. The migrate function lists all operators and designs it finds in the network, and you have a choice which ones you would like to keep. [How? Confirm your selection with Migrate \(item 3\)](#).
- Add new Operators and Administrators - press *Add Operator* ([item 4](#)) and set a name, initial password and operator type.
- For each newly added operator, [use drag & drop to](#) select features, designs and servers ([items 5](#)) which are permitted to him or her.

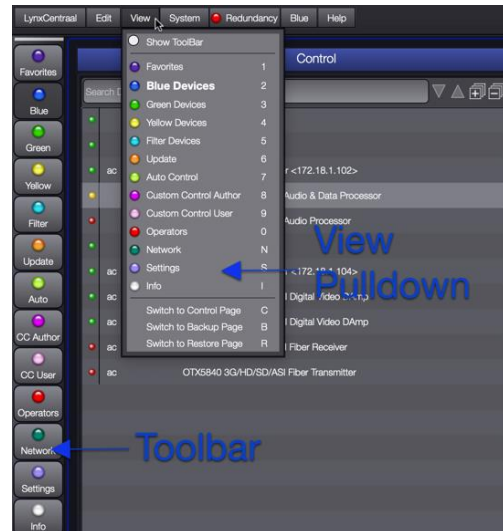
Features (Main pages)

Lynx Centraal has 13 Features. Each feature corresponds to one Main Page. Each page has UI elements for performing specific functions. Pages are often further divided into sub-pages.

You can navigate between pages using the toolbar on the left, the view pulldown or hot-keys.

There is a dedicated page for each of the hardware device types: Series 5000 (blue), greenMachine (green) and yellobrik (yellow). Functions which all devices share are available as additional pages, such as Update, Operators, Settings and Info. There are some pages such as Custom Control which are only shared by blue and green. Operators, Settings and Info are for setting up users, preferences and hotkeys.

It is possible to limit which features an operator can see and edit. Filter, Settings, Operators and Info are always available. It is not possible to turn these pages off for any operator.

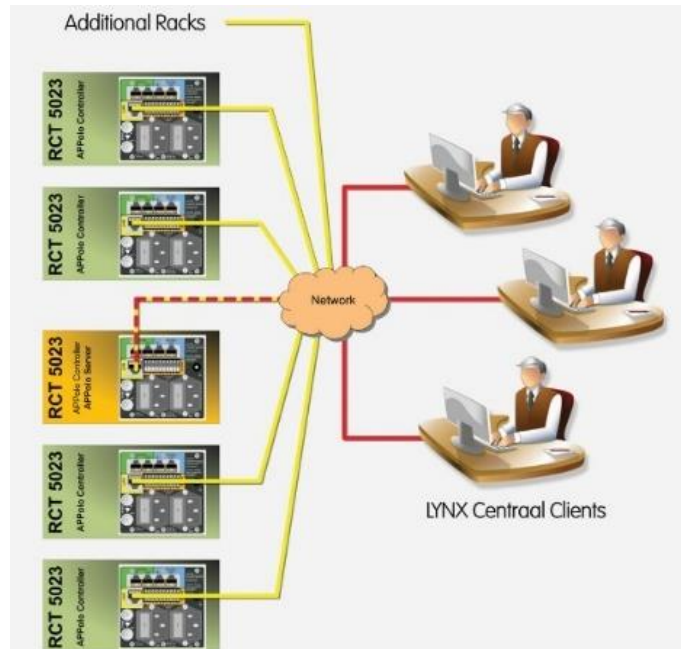


	Favorites	All Devices
	Blue Devices	Blue Devices (Series 5000)
	Green Devices	Green Devices
	Yellow Devices	Yellow Devices (yellobrik)
	Filter Devices	All Devices
	Update	All Devices
	Auto Control	Blue Devices (Series 5000)
	Custom Control Author	Blue and Green Devices
	Custom Control User	Blue and Green Devices
	Operators	General Control
	Network	Blue and Yellow Devices
	Settings	General Settings
	Info	General Information

Series 5000 Control Topology

Series 5000 Controller

A typical LYNX Technik Series 5000 signal processing system consists of rack frames with boards, rack controllers, and the LynxCentraal Control system. Each Series 5000 rack frame requires an RCT 5023-G. For large configurations, an optional dedicated control server running the system software, can be added. The rack controller and the control server are logically attached to each other via an IP network.



The RCT 5023-G is the basic controller card and is all you need to connect a Series 5000 2RU rack frame to the LynxCentraal Control software. The controller card has a LAN network interface that uses the LAN connection on the terminal plate of the rack frame. All LAN related settings are stored on an internal flash memory. Each controller card in one system needs to have an individual IP-address.



OH-RCT5023-SVR

The OH-RCT5023-SVR option is an independent Linux Server with its own IP-address. For power and LAN connection it is clipped as a piggyback onto the RCT 5023-G controller card.

Adding the OH-RCT5023-SVR option to a system, enables features like full SNMP support, Backup-Restore for the complete system and many more.



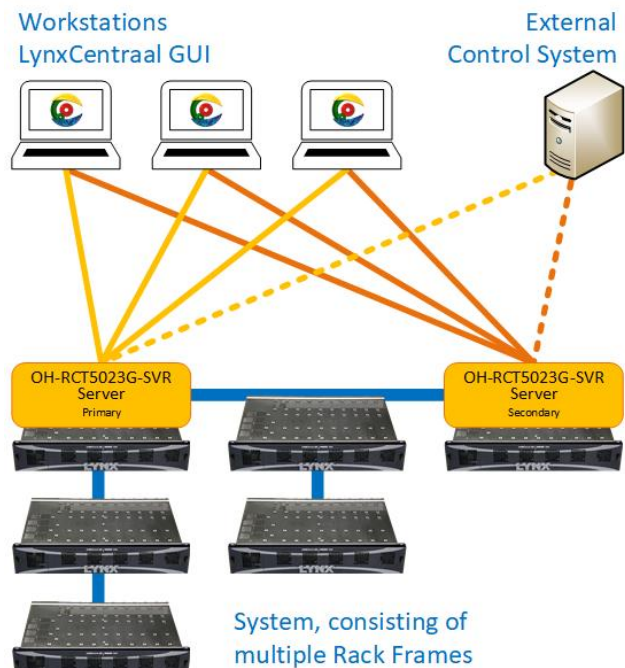
REDUNDANT SERVER CLUSTER

Two control servers can be configured to form a cluster of redundant servers in the Current Infrastructure Configuration table.

Since the control server serves as a fundamental part of the system, a backup and failover solution may be required for system servicing and functionality.

Users may add a second control server to a system, which serves as a backup or secondary server. In the case that the primary server is not available on the network, the secondary server takes over the active role, with all functionalities.

Therefore, even in the unlikely event of a failure of the primary server, the system's functions are always available.



NOTE: Both servers operate under their own individual IP address. The entire system is accessible under two different IP addresses.

NOTE: The processing boards will continue to work even if the Primary SERVER is not available. In the event of a server failure, only the remote access (e.g. from the GUI) and additional system functions (e.g. AutoControl) will no longer be available.

Network Connections

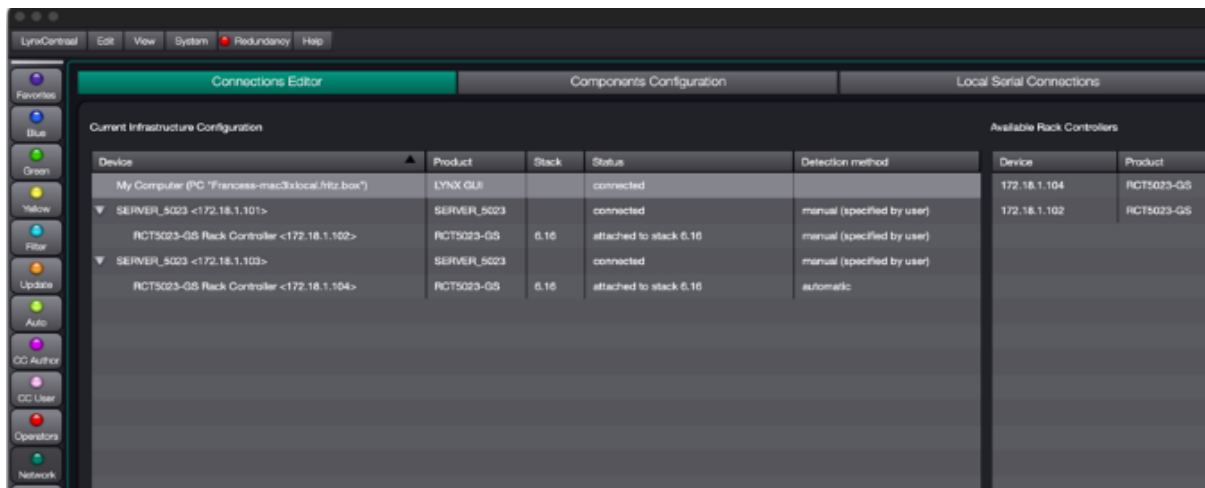
The LynxCentraal GUI will communicate to the LYNX series 5000 RackFrames over the IP network. Therefore, the first important step is to make sure that the LYNX Components and the PC are using compatible IP network settings. By factory default, the LYNX Components are configured with the following FIXED IP addresses:

LYNX RackController	(RCT5023-G)	192.168.1.162
LYNX SERVER	(RCT5023_SERVER or RCT5031)	192.168.1.160

NOTE: The described steps below refer to a new LYNX Controller or LYNX SERVER with their respective IP addresses set to the factory defaults.
The IP settings can be reset to the factory defaults by pressing the RESET BUTTON on the card edge for more than 5 sec.

Network Configuration

The network feature is where control servers are configured and attachments between control servers and RCT 5023 rack controllers are made. It also where you configure the local COM ports. (This feature is available for blue and yellow)



Current Infrastructure Configuration

The current infrastructure configuration table, on the left, lists all control servers which were discovered in the LynxCentraal IP network via ethernet broadcast. Below each control server, is a list of its current controller attachments. Servers which are not permitted for the current operator, or servers which were filtered out by the current operator do not show up in this table.

Available Rack Controllers

The available rack controllers table, on the right, lists all RCT 5023 (and RCT 1012) rack controllers which were discovered in the LynxCentraal IP network via ethernet broadcast.

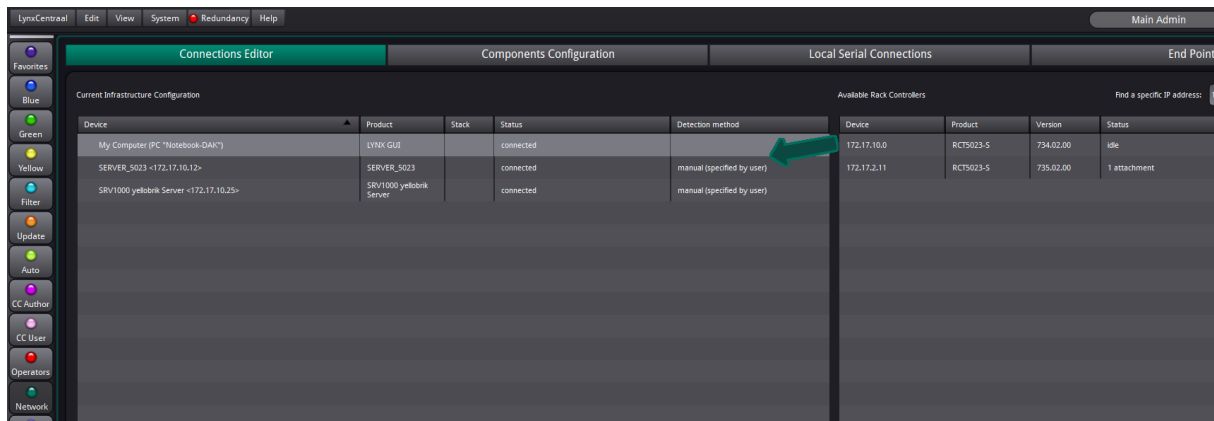
Control servers, RCT 5023 (and RCT 1012) rack controllers which reside in different IP subnets can be added explicitly with the IP find tool in the upper right corner of the page.

Options of Attaching a RCT 5023 Rack Controller to a Control SERVER

1. Select an RCT 5023 (or RCT 1012) rack controller from the *Available Rack Controllers* table and drag it into the *Current Infrastructure Configuration* table, dropping it onto the desired control server.
2. Select an RCT 5023 (or RCT 1012) rack controller in the *Available Rack Controllers* table, open its context menu and select *Attach*. This will present a dialog which allows you to pick the desired control server.

3. Select an RCT 5023 (or RCT 1012) rack controller from the *Available Rack Controllers* table. This action will fill the information area at the bottom with data. Click the *Attach* Button in the Current Attachments section. This will present a dialog which allows you to pick the desired Control Server.

One RCT 5023 (or RCT 1012) rack controller can be attached to up to three control servers. [Each server can assign an individual name to the controller.](#)



Options of Detaching a RCT 5023 Rack Controller from a Control SERVER

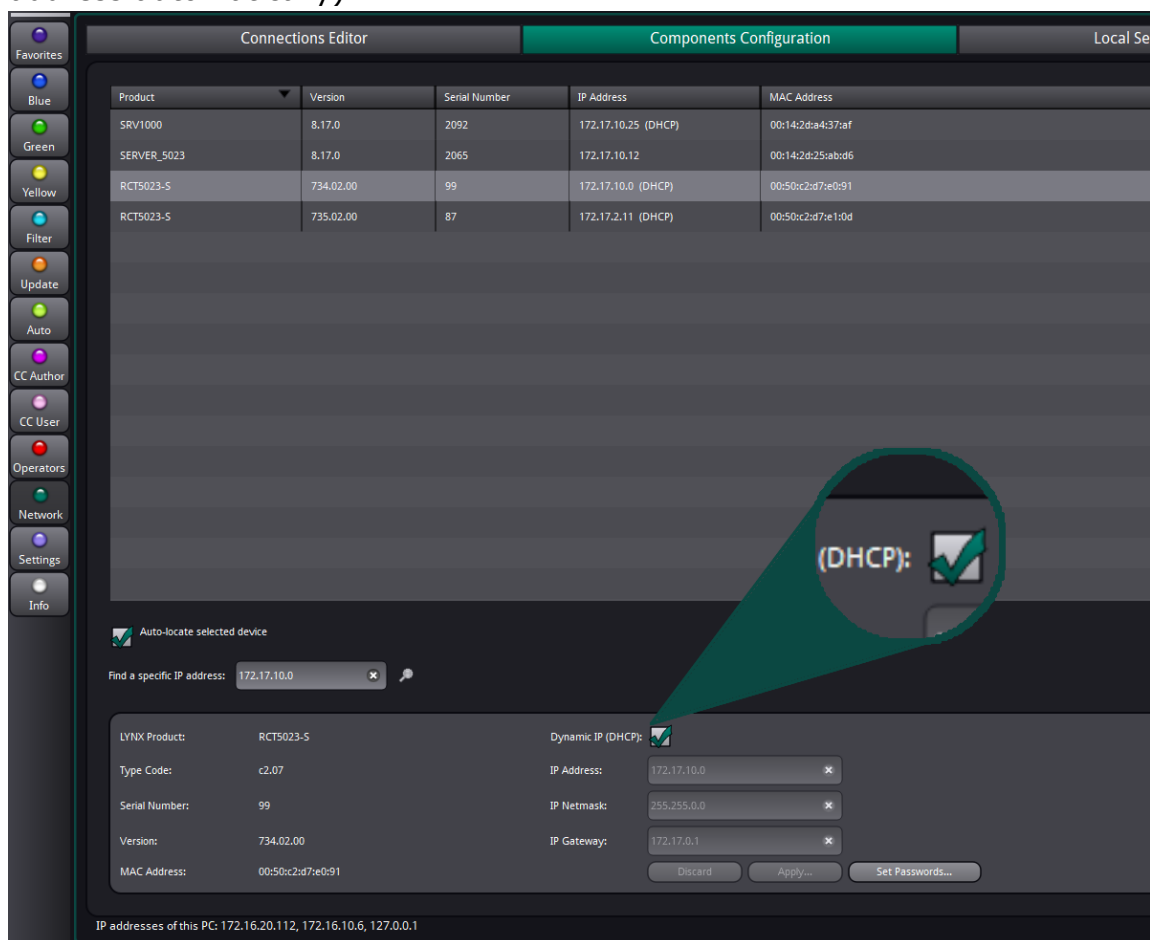
1. Select the RCT 5023 (or RCT 1012) rack controller from the *Current Infrastructure Configuration* table that you would like to detach. Drag and drop it back to the *Available Rack Controllers* table or to the trashcan below.
2. Select the RCT 5023 (or RCT 1012) rack controller from the *Current Infrastructure Configuration* table that you would like to detach. Open its context menu and select *Detach*.
3. Select an RCT 5023 (or RCT 1012) rack controller from either of the two tables. This action will fill the information area at the bottom with data. Click the *Detach* Button in the Current Attachment section.

Components Configuration

This section lists all control servers, RCT 5023 and RCT 1012 rack controllers which were discovered in the LynxCentraal IP network via ethernet broadcast. Servers and controllers which reside in a different IP subnet can be searched explicitly with the IP find tool below the product table. The selected item detail is visualized below the table. You can change the IP and passwords settings.

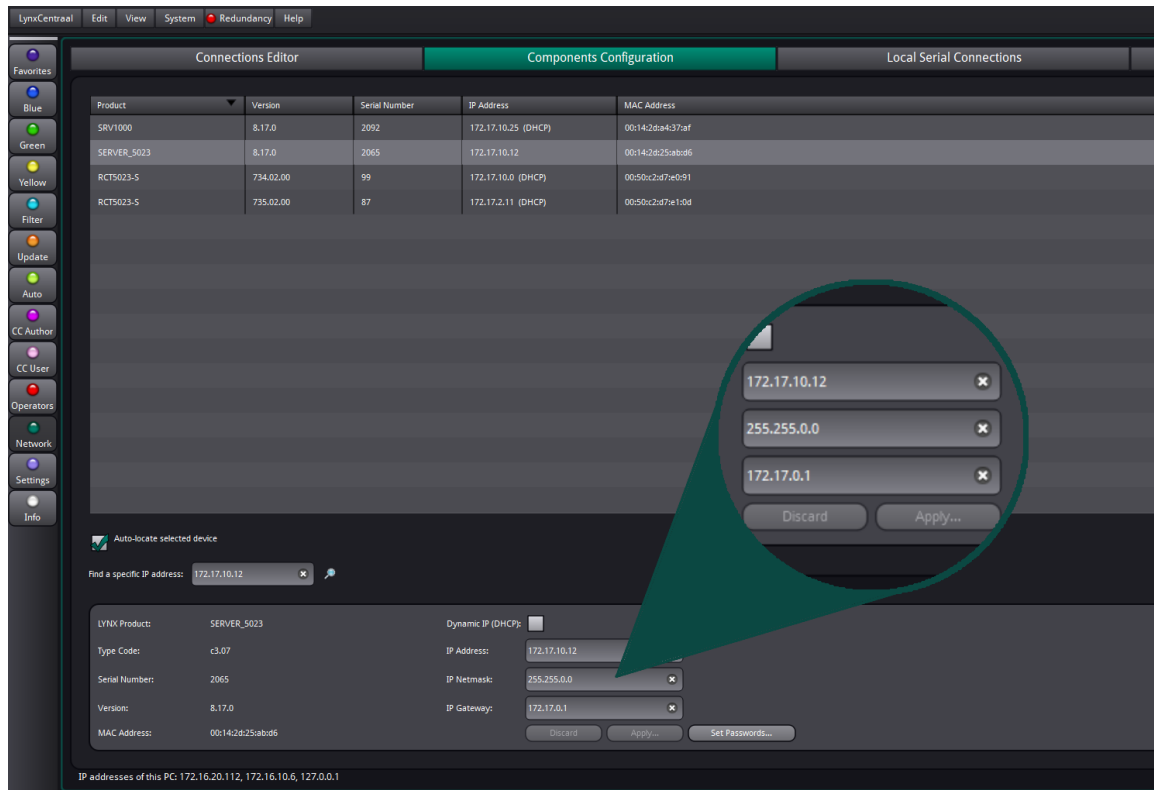
Select the LYNX RackController or LYNX Server in the list and do one of the following:

1. If the system is connected to a network and you have a DHCP server:
Activate the DHCP checkbox (so that the LYNX Controller can obtain an IP address automatically).

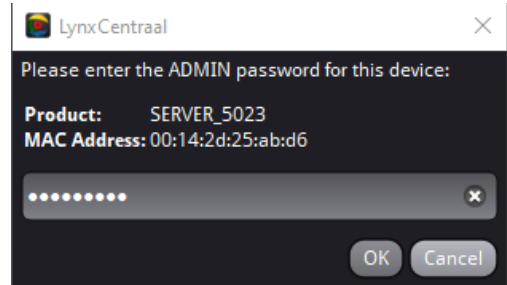


2. If you need to set the IP address manually, then you need to set the IP address of the LYNX RackController and/or LYNX Server for the same network-region as your PC (refer to the IP address of your PC – MyComputer, which you had noted in step 5).

For example, in this case you could set the IP to 192.168.178.64. The subnet mask is usually 255.255.255.0. Make sure to enter something for the gateway (even if not needed, but you have to put a number in there). For example, the gateway can be set to 192.168.178.1



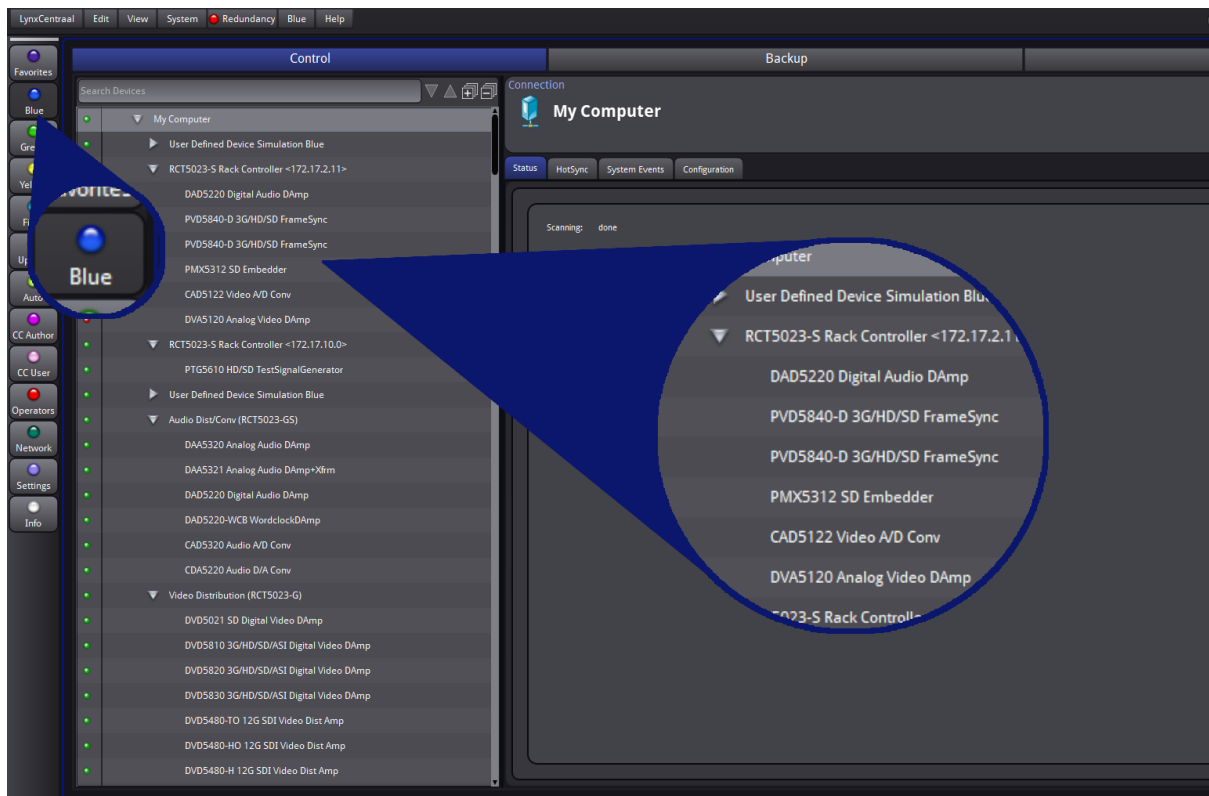
- In any case (1.) or (2.), click on the "Apply" button to apply your changes. You will be asked to enter the admin password. The default (factory setting) "admin" password is **lynx\$admin**. Repeat the above steps (1.) or (2.) for all LYNX RackControllers and LYNX Servers which need to be connected to your network.



NOTE: If your LYNX component is not shown in this list, then you can connect (through a 1-to-1 connection to the respective rack frame) a regular web browser to the current IP address of the LYNX chassis, login as user "admin" and make the IP settings on the "System" page.

BLUE Page

If all went well then you should now see devices populate the navigation tree on the left of the BLUE page of the LynxCentraal GUI and you are ready to work with the connected Lynx devices.



NOTE: The current status of all information is always updated "live".
E.g. when the current video input is removed, the GUI will update the appropriate status information immediately (usually within ~500 msec).

NOTE: Any changes to the configuration of a card (by mouse-click in the GUI) are communicated directly to the device and made effective.
I.e. it is not required to trigger a "take-over" function or similar, for any change to become effective.

More Information needed?

For more detailed information please check the LynxCentraal manual which can be downloaded from the LYNX Technik website over here:

<https://www.lynx-technik.com/downloads/lynxcentraal/>

Or it can be opened directly in the GUI under 'Help/Open Help'.

