2N PLUGIN SYMMETRY

CONFIGURATION GUIDE

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Introduction

The interface between 2N IP Intercoms and Symmetry Access Control allows Symmetry users to monitor and manage intercom calls through one comprehensive security platform.

2N provides a wide variety of Intercom products supporting a flexible deployment with or without a central SIP exchange. This integration document is a guide on how to allow 2N Intercoms to be added to the Symmetry system giving Symmetry operators the ability to control 2N Intercom calls as well as receive 2N intercom events in the Symmetry client installed locally on your computer.

This document provides instructions on how to configure, add and then use your 2N IP Intercom within the Symmetry software. To use 2N products with Symmetry you will need to install **2N Plugin for Symmetry**. To activate the interface, purchase **2N Plugin for Symmetry License** from the 2N distribution channel.

System Overview

Symmetry with 2N Plugin for Symmetry allows user to integrate 2N devices into the Symmetry system. Symmetry and 2N Devices communicate over REST API.

Compatible devices

2N® IP Style, 2N® IP Verso/ Verso LTE, 2N® IP Solo, 2N® IP Force, 2N® IP Safety, 2N® IP Base, 2N® IP Audio Kit, 2N® IP Phone D7A.

Prerequisites

Software Used:

- Symmetry Professional 9.4.19.46205
- 2N OS FW v. 2.41
- 2N Plugin for Symmetry
- Devices used:
- 2N IP Phone D7A (Client) 10.27.10.154 (in this document)
- 2N IP Verso (Station)10.27.24.34 (in this document)
- 2N IP Style (Station)10.27.36.9 (in this document)

Devices are split into two categories in Symmetry:

- Clients (2N® IP Phone D7A)
- Stations (2N Intercoms)

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When we are referring to either Client or Station in this document, we refer to it in this meaning if it's not indicated otherwise.

*All the following in this manual assumes that you have Symmetry client installed on your computer.

*We tested on Symmetry Professional 9.4.19.46205.

*2N Plugin for Symmetry and 2N Plugin License is required.

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2N Plugin for Symmetry Installation

There are basically two steps to make 2N Intercoms working within Symmetry System.

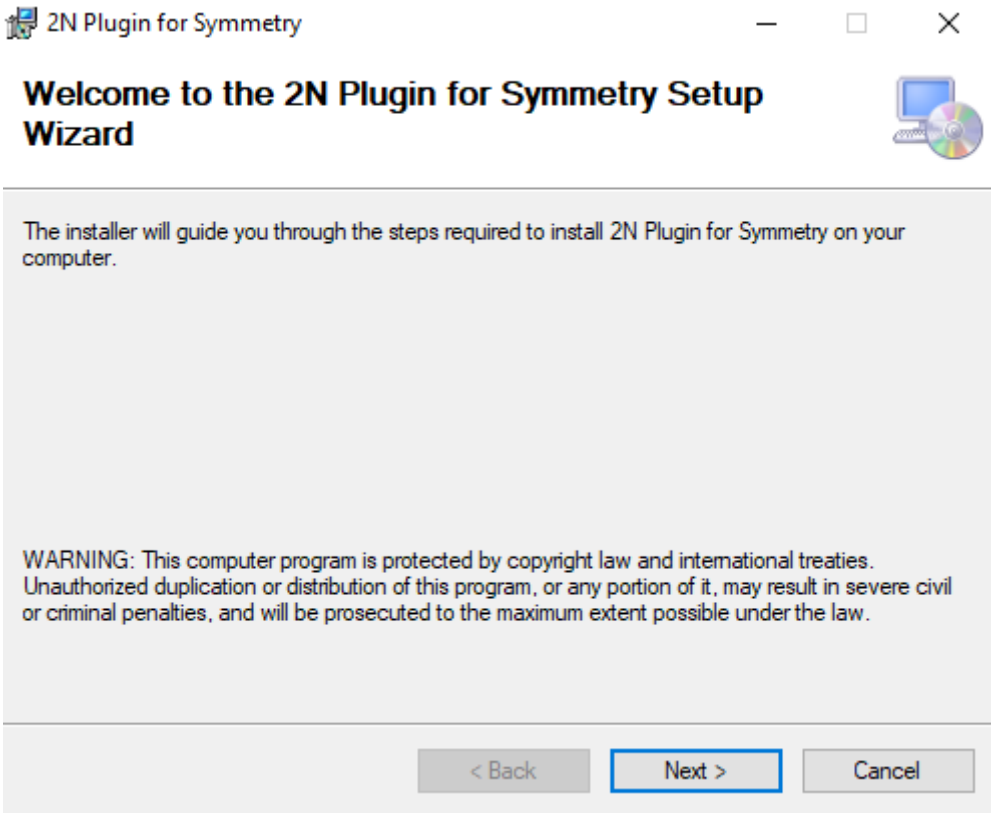
1. Install 2N Plugin for Symmetry.

2. Purchase and install a 2N Plugin License file (a guide how to do it later in this section)

With Symmetry installed on your computer you have to close the application in order to start installing 2N Plugin.

Download 2N Plugin for Symmetry from 2N Official Website (LINK).

1. Start the installation file by double-clicking the downloaded 2N_Plugin_for_Symmetry.msi file.



2. Read the license agreement and click „Agree“ to continue the installation.

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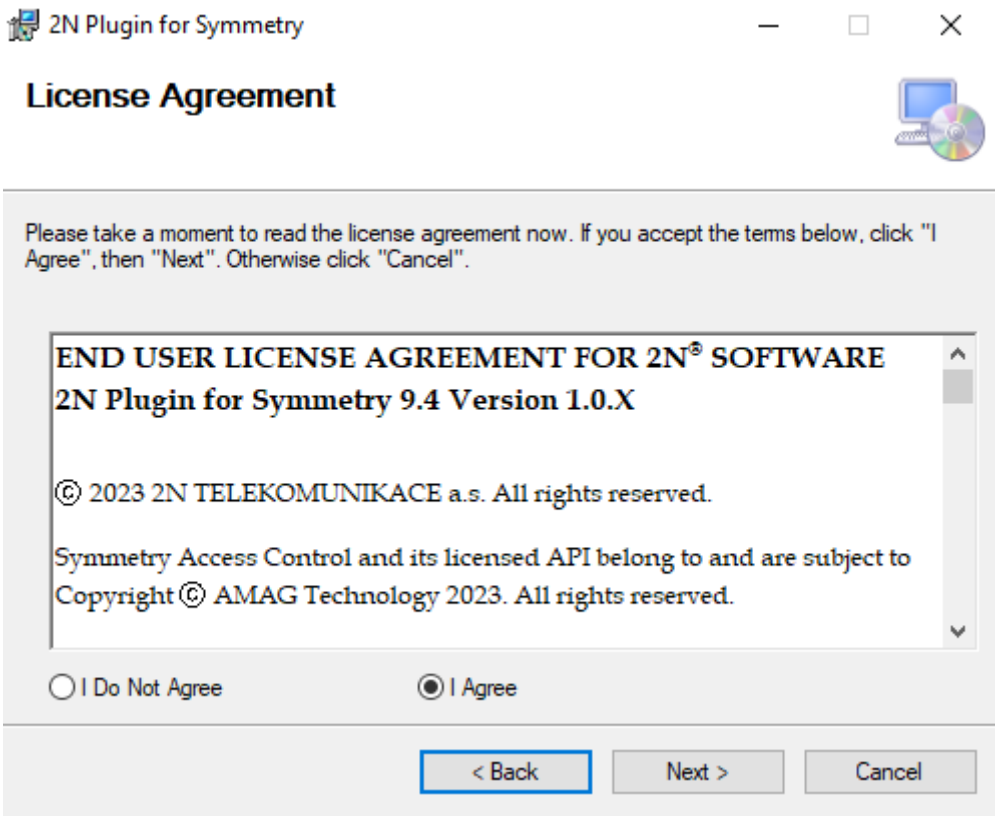
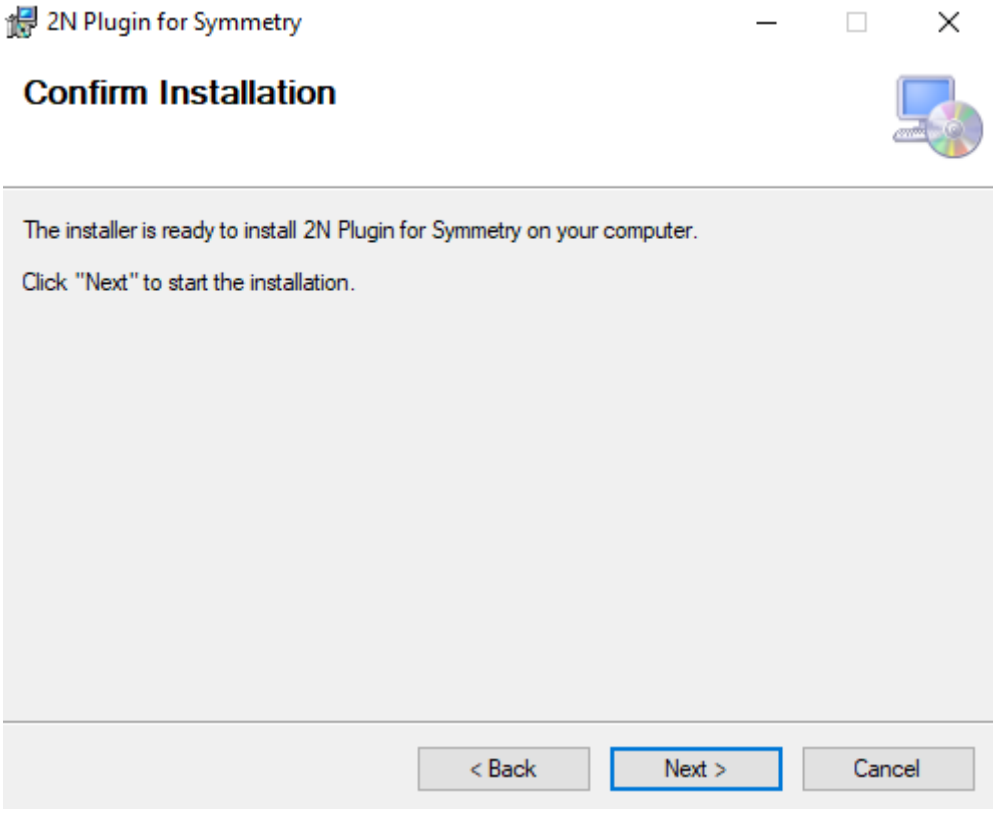


3. Click „Next" to begin the installation process.



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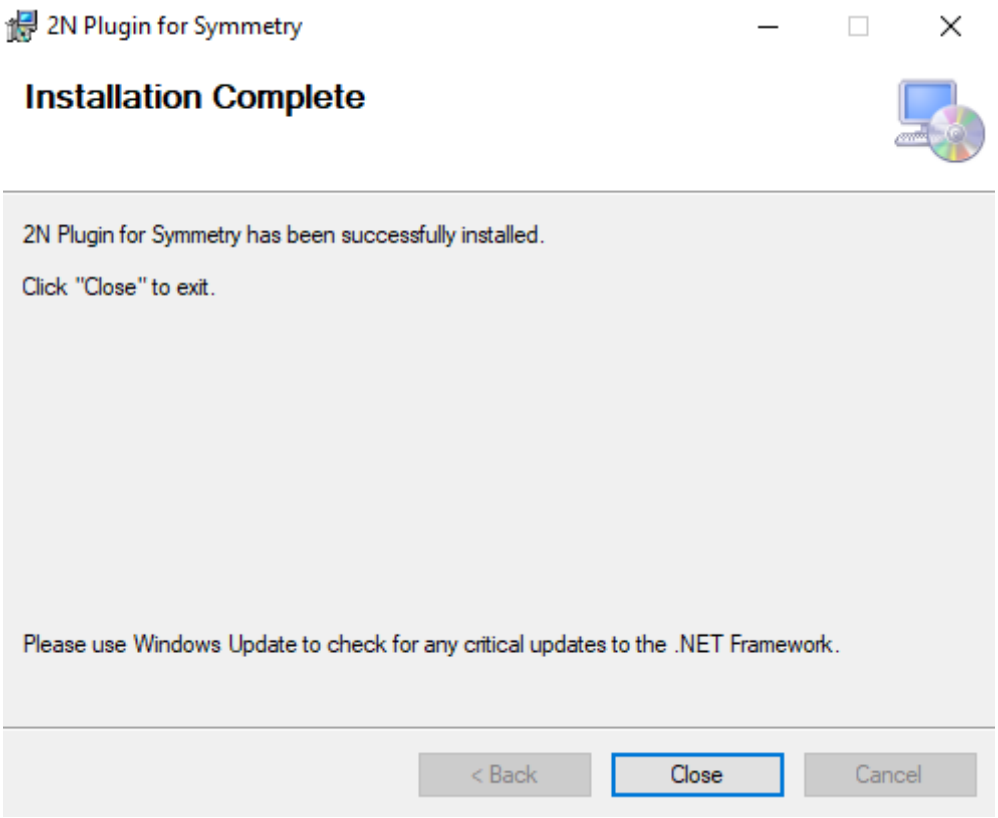
4. When installation process is completed, click „Close“ to exit.



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Adding 2N Devices to the Symmetry

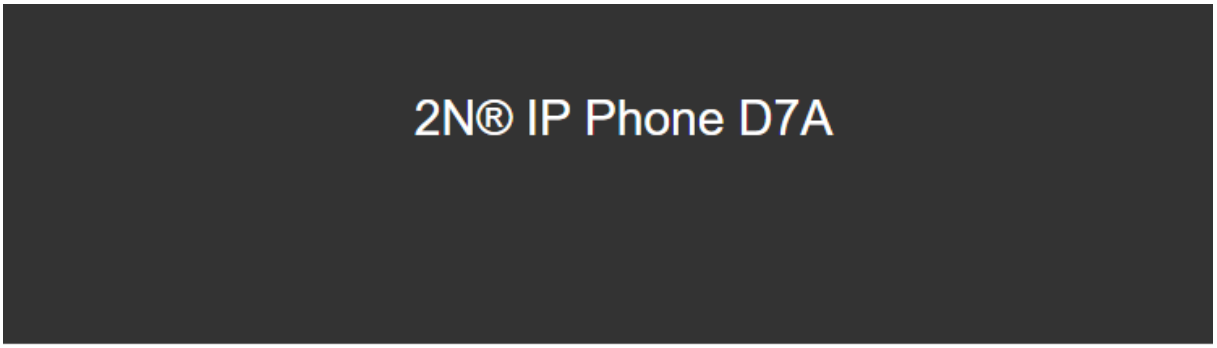
As mentioning before in Symmetry devices are sorted into two categories:

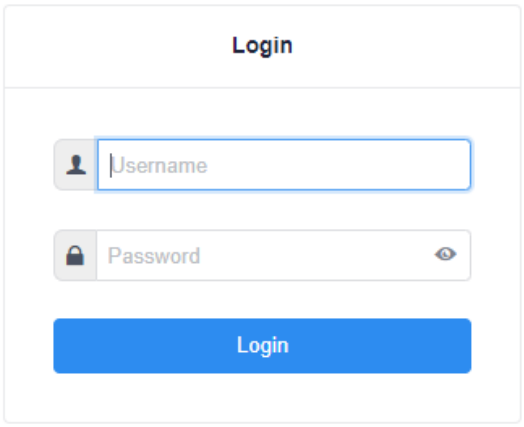
- Clients (2N Ip Phone D7A)
- Station (2N Intercom)

In following chapter, we will show you how to add 2N devices into the Symmetry software.

First of all, we will be setting up the 2N IP Phone D7A. By default, the IP phone is set in such manner that it receives the IP address from your LAN DHCP server. Know the current IP address simply using your phone menu:

Settings > Status > Network > Ipv4 status.





Enter the IP address into your favorite web browser. Make sure that the PC and phone are connected to one and the same LAN.

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The default username is “admin” and the password is “2n”. After logging in for the first time, you will be prompted to change your default password for security reasons.

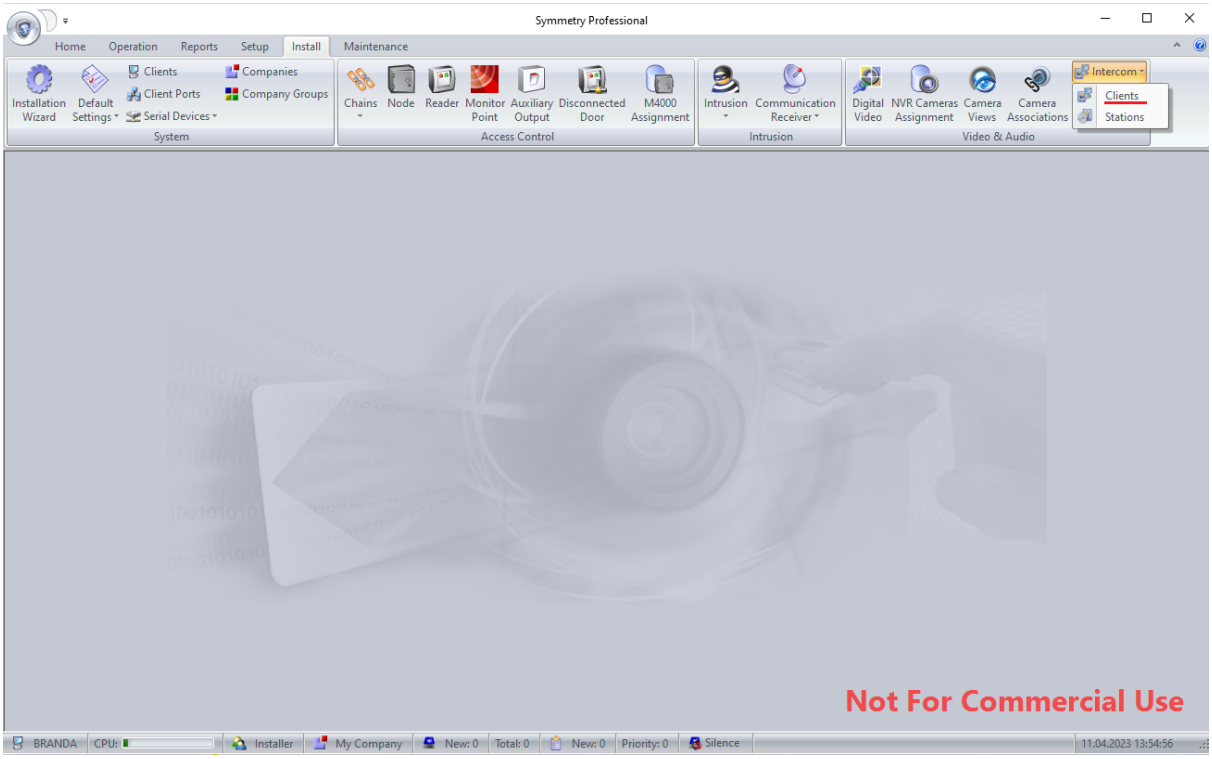
Adding Clients

In case of 2N Integration into the Symmetry software we currently support only 2N IP Phone D7A.

So, we will show you how to add it into the Symmetry.

1. From upper menu choose Install tab

2. Choose Intercom on the right side and then Clients



3. You can add new devices by clicking on „New“ button.

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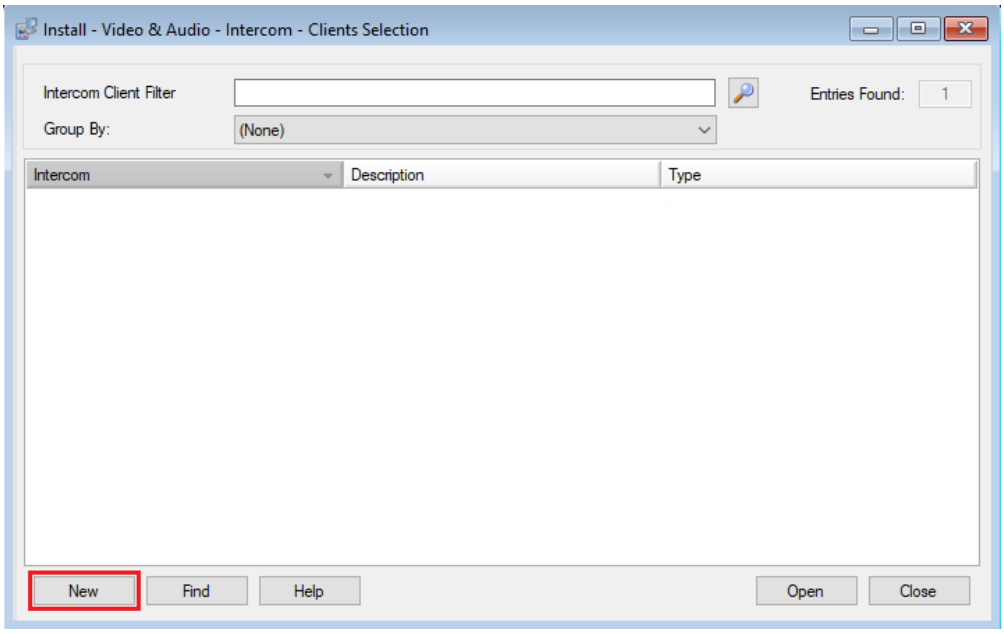
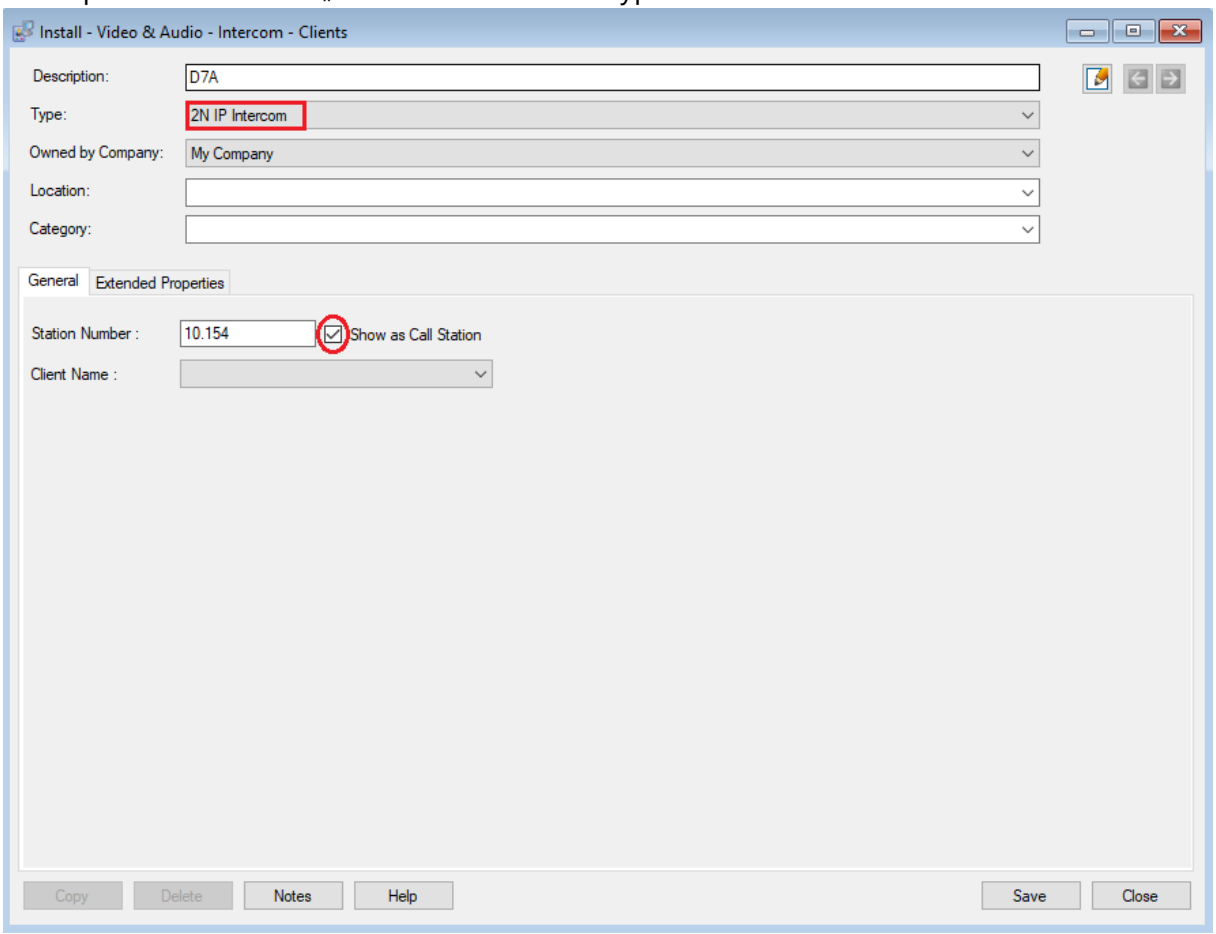


4. In General tab fill out following fields:

It´s important to choose „2N IP Intercom" as a Type of Client



- Description: (for example D7A)

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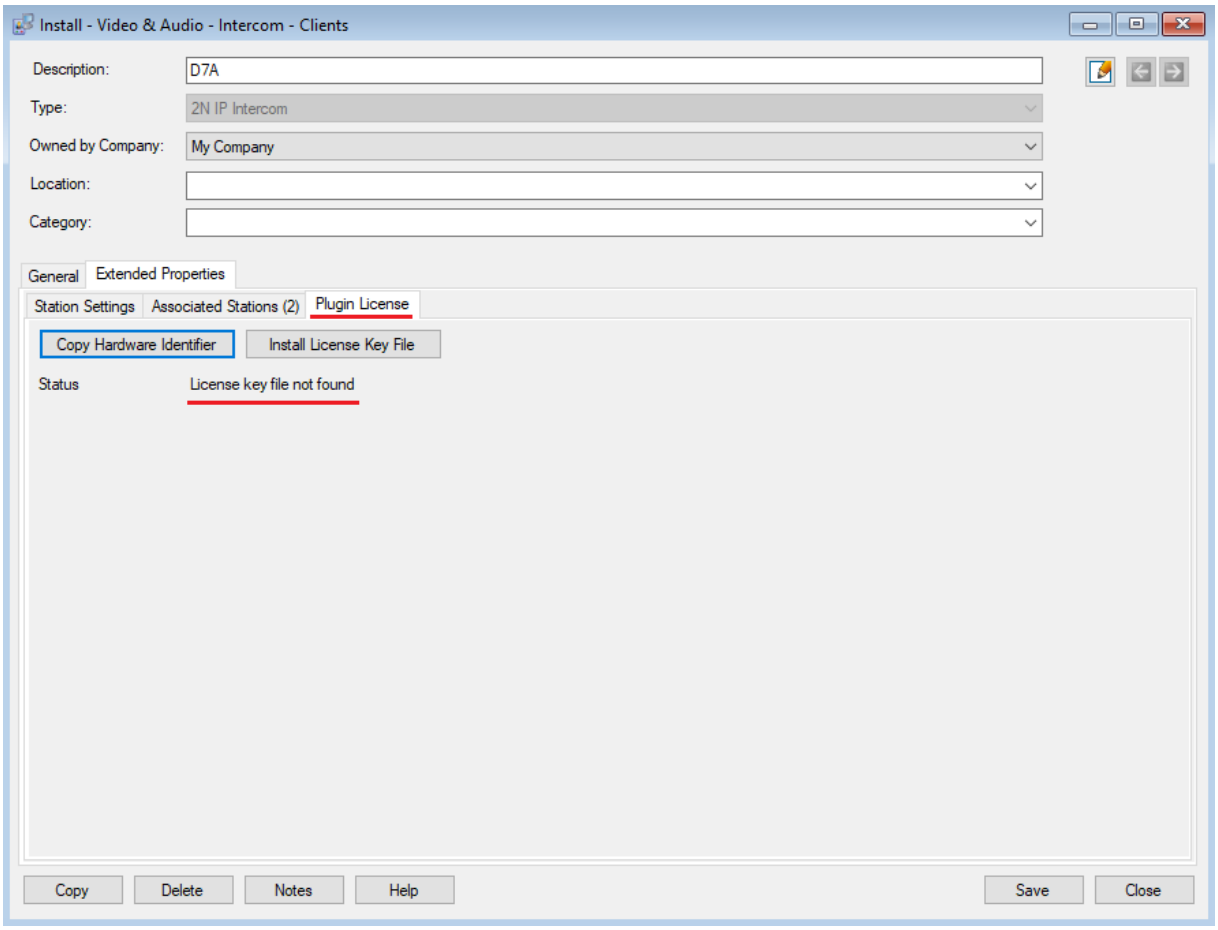
- Type: 2N IP Intercom
- Owned by Company: choose your company
- Station Number: the ID which the Station will be known in Symmetry
- **There are two options for Station number of the Client:*
- *A) if you are calling as a direct SIP call you can use your own ID as a Station Number*
- *B) if you are calling via SIP Proxy you'll use your registered number (e.g. 1181 for example)*
- **See: Calling Set-up**
- Show as Call Station Checkbox: must be checked for the Client to appear on the Home Screen

2N Plugin License Installation

1. Click Extended Properties – Plugin License tab will be automatically selected

2. The status is currently "License key file not found" because **License key file** is not yet added



3. There you need to Install a License Key File to start using 2N Devices within the Symmetry system.

4. By clicking „Copy Hardware Identifier" you will copy your HW Identifier into the clipboard and you will use this ID when requesting a license key for 2N Plugin for Symmetry.

5. A pop-up window will be shown indicating that you have successfully copy the Hardware Identifier.

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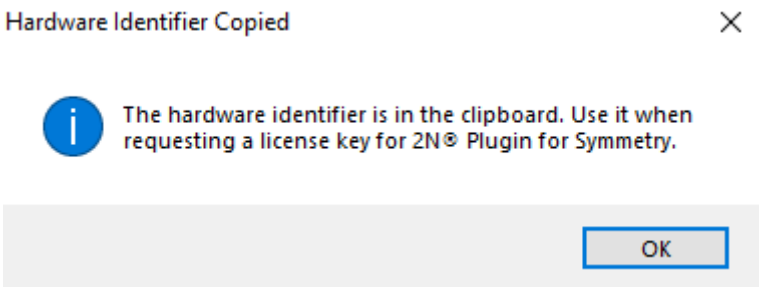
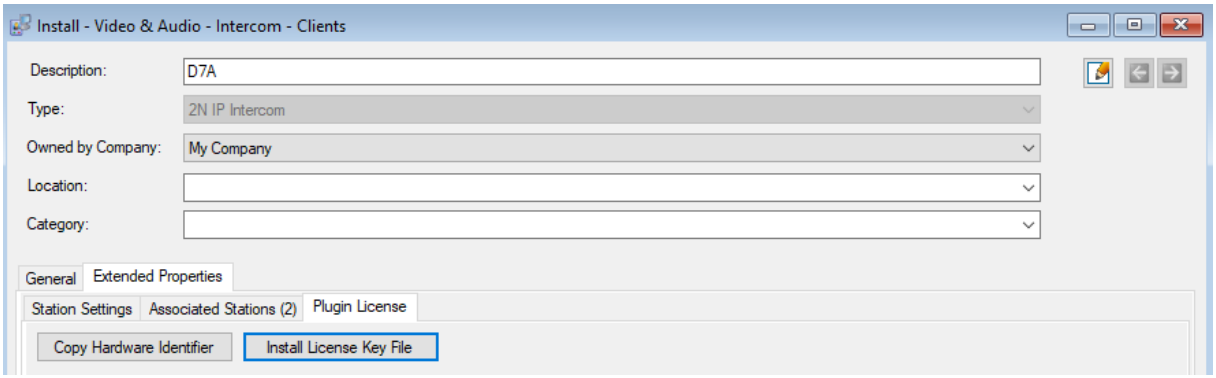
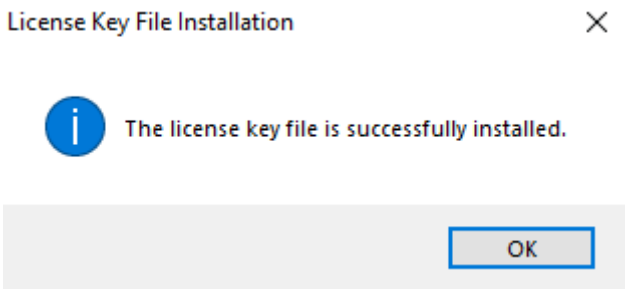


6. When you obtained a license key for 2N Plugin for Symmetry you can click „Install License Key File" a new window will pop up and you just find location of you License file in your system and open it.



7. When License key file is successfully added a pop-up window will be shown.



Now we can continue with setting up a Client.

1. Click Extended Properties and then „Station Settings".

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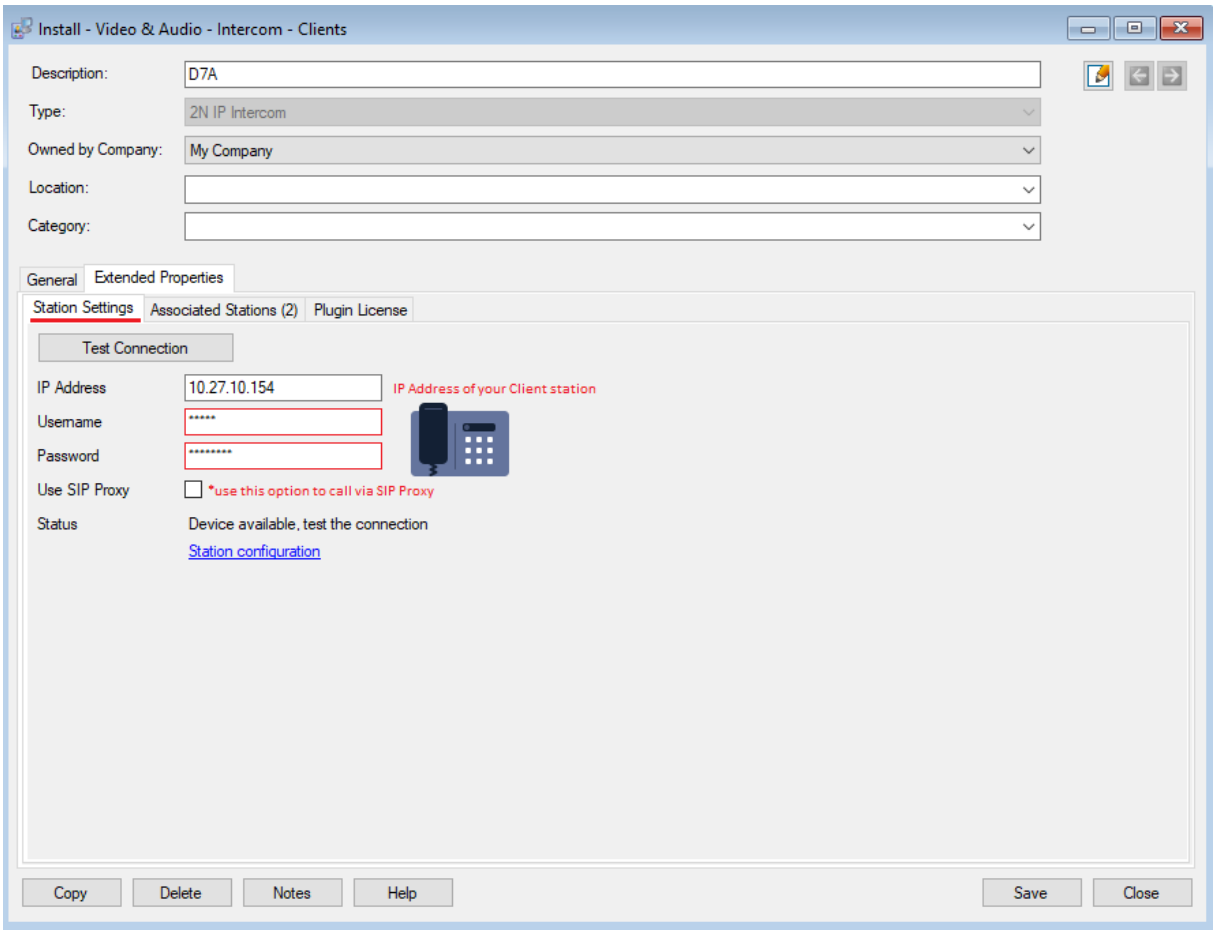

Fill out your Client device IP Address and credentials for log in into your device.

If you let „Use SIP Proxy" checkbox unchecked you will be calling using Direct SIP call.

2. After you put in the correct IP Address and credentials Status will show: *„Device available, test the connection"*.

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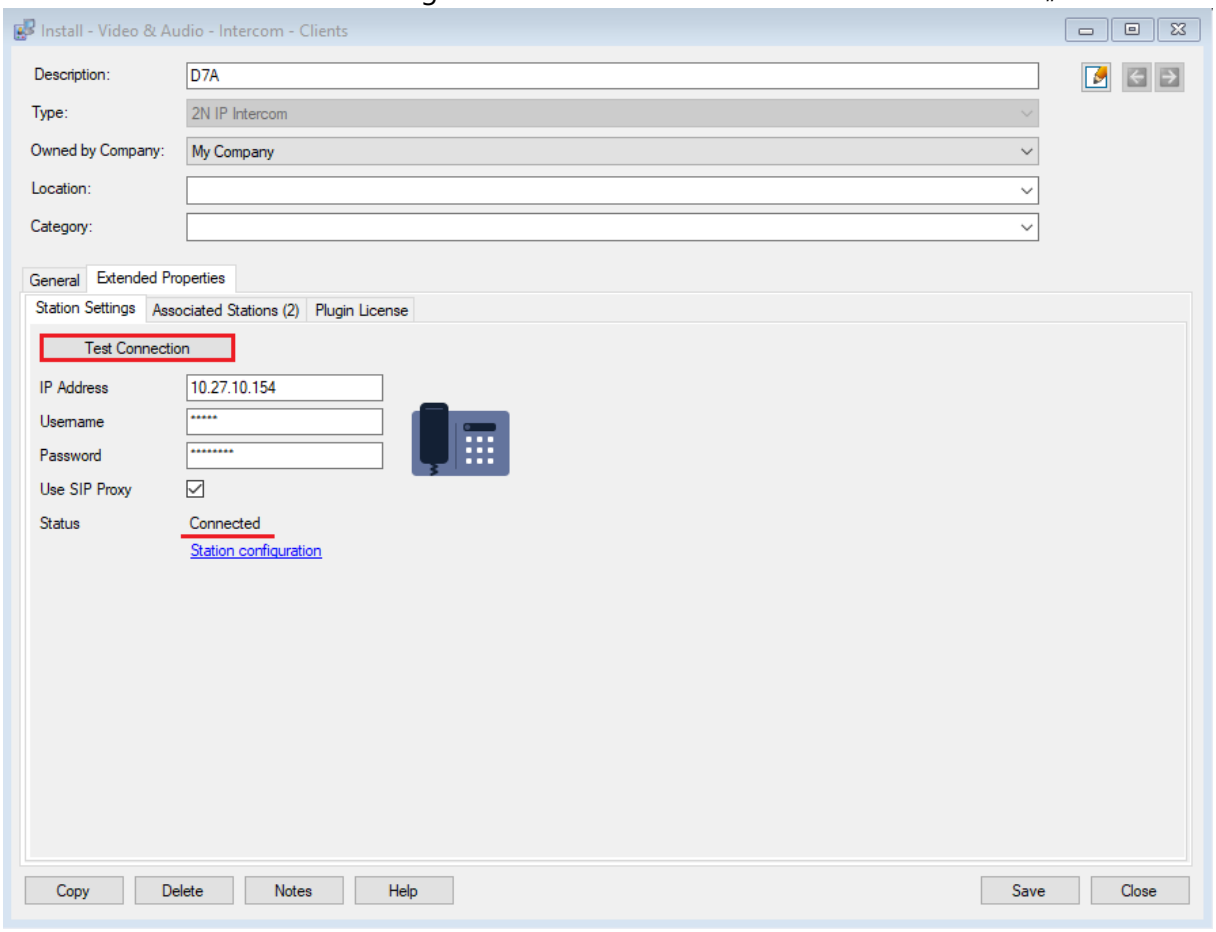
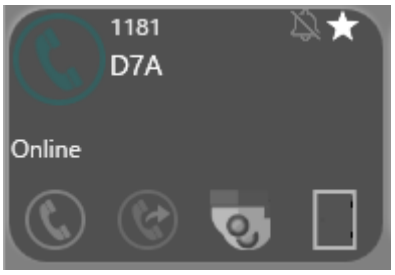
3. Press „Test Connection Button“ to make sure your device can be added. If everything is okay Status changes to „Connected“.



Now you have added your Client into the Symmetry System.

You can view it from: Home > Video & Audio > Intercom



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2N Intercom Configuration and Prerequisites

For the 2N intercom to work with Symmetry software, several settings need to be made.

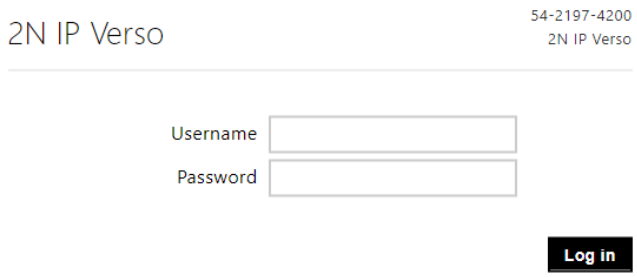
The most important thing to do is to turn on HTTP API Services and HTTP API Account in 2N Intercom.

That way you will be able to add an 2N Intercom to the Symmetry software as a Station.

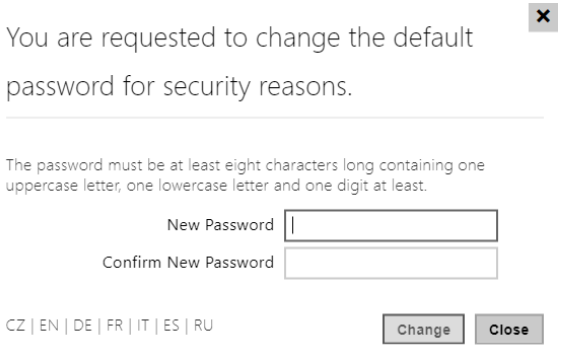
First of all, you need to log in to your 2N IP Intercom. For this you just need to enter the Intercom IP address into your favorite browser. We recommend you using the latest Chrome, Firefox or Internet Explorer 9+ versions. 2N IP Intercom may not be fully compatible with older browser versions.

For first log in the default credentials are as following:

- name: admin
- password: 2n



The Intercom requires a password change upon the first login. Always make sure you have secure password – at least eight characters including one capital letter, one small letter and one digit.



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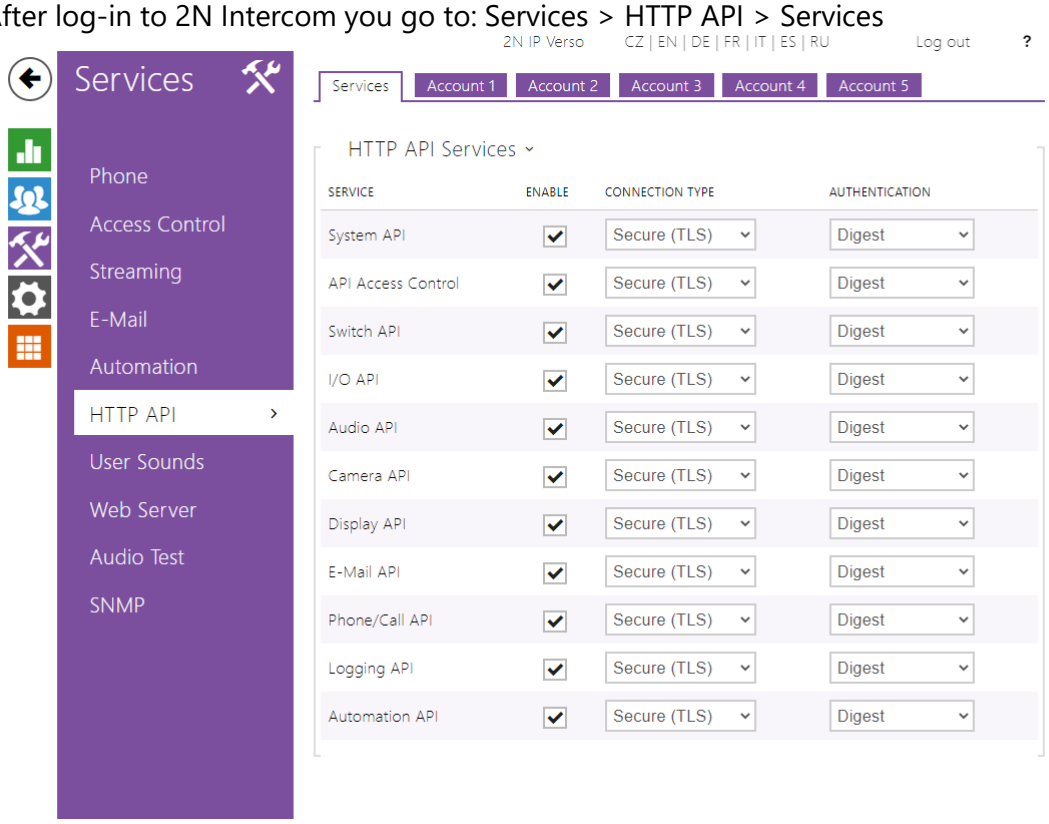
HTTP API Activation

1. After log-in to 2N Intercom you go to: Services > HTTP API > Services



Make sure all APIs are enabled and set to Digest Authentication.

Connection type can be set to Secure (https) or Unsecure (http).

2. Services > HTTP API > Account1

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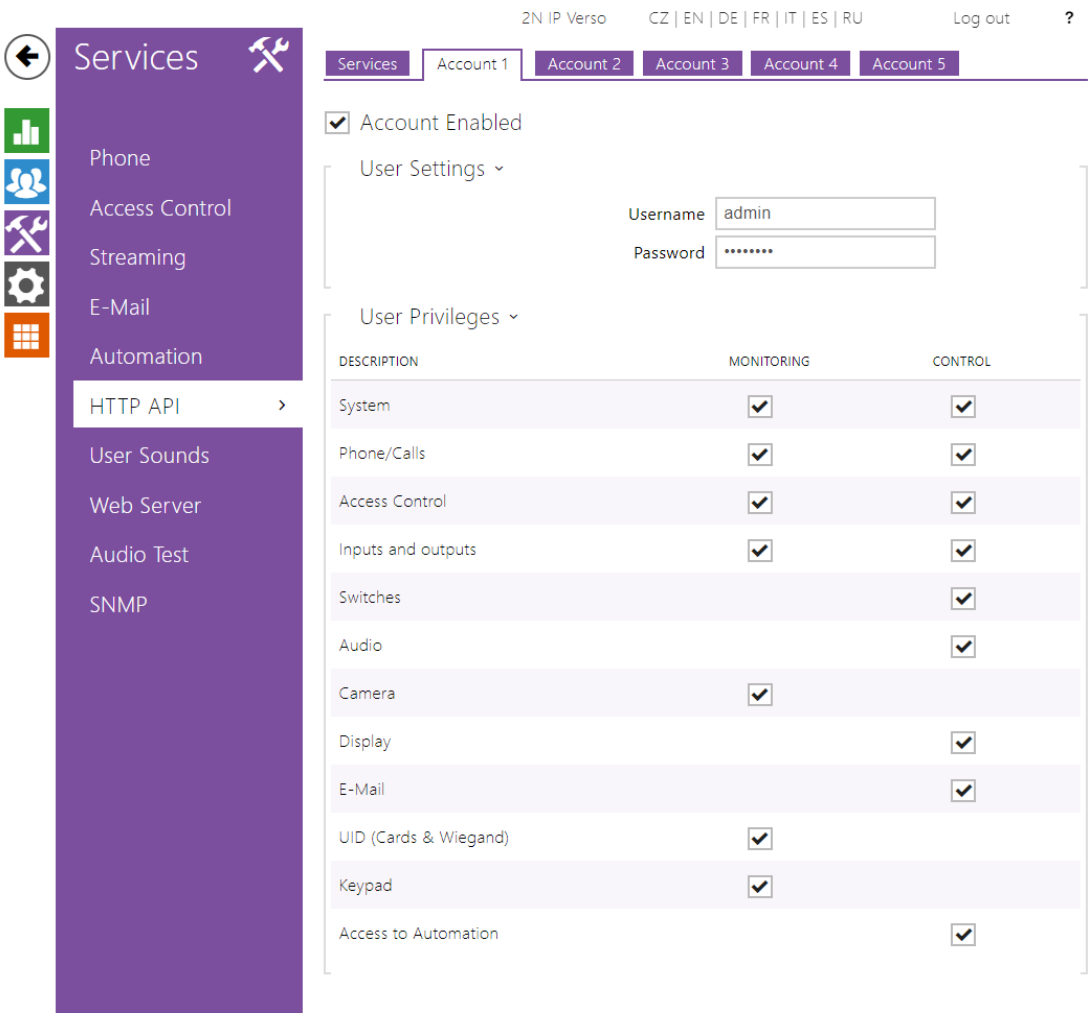

Under one of the Account tabs, enable an account that will be used to connect to the Symmetry.

Use the following User Privileges and set the credentials.

Calling Set-Up

When talking about calling in this document we will be referring to two main methods.

Direct SIP Calls (eg. SIP:IP_addr.) and calling using SIP Proxy.

A) Direct Calls

- all you have to do is just add 2N Intercom into the Symmetry System
- make sure you have Enabled SIP Account

Prerequisites:

1. Symmetry Installed

2. Symmetry Plugin Installed **See: 2N Plugin for Symmetry Installation**

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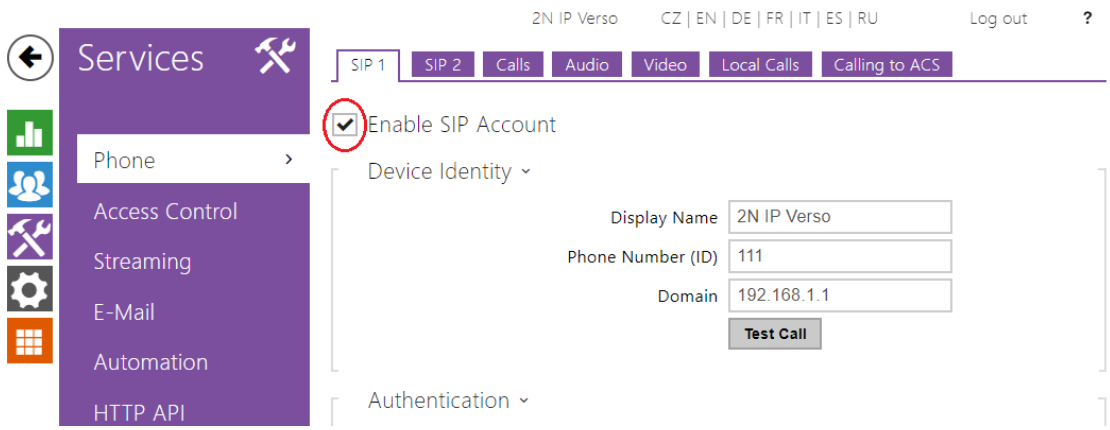
3. Client and Station added into Symmetry System

See: Adding Client, 2N Intercom configuration and prerequisites, Adding Station

Assuming you have Symmetry Installed and have 2N Intercom (Station) added into the system and 2N Ip Phone D7A (Client).

Then all you have to do is to make sure you have SIP1 Account Enabled in Services > Phone > SIP1.



Then you can make calls using direct SIP call.

B) Calling using SIP Proxy

2N IP Intercom

If you want to call using SIP Proxy this is what you have to do on 2N Intercom side.

You have to register a SIP Proxy of your choice in either of two SIP accounts.

In this document we will use SIP1 Account. For demonstration we will be using NetStar Proxy.

In our example these parameters need to be filled:

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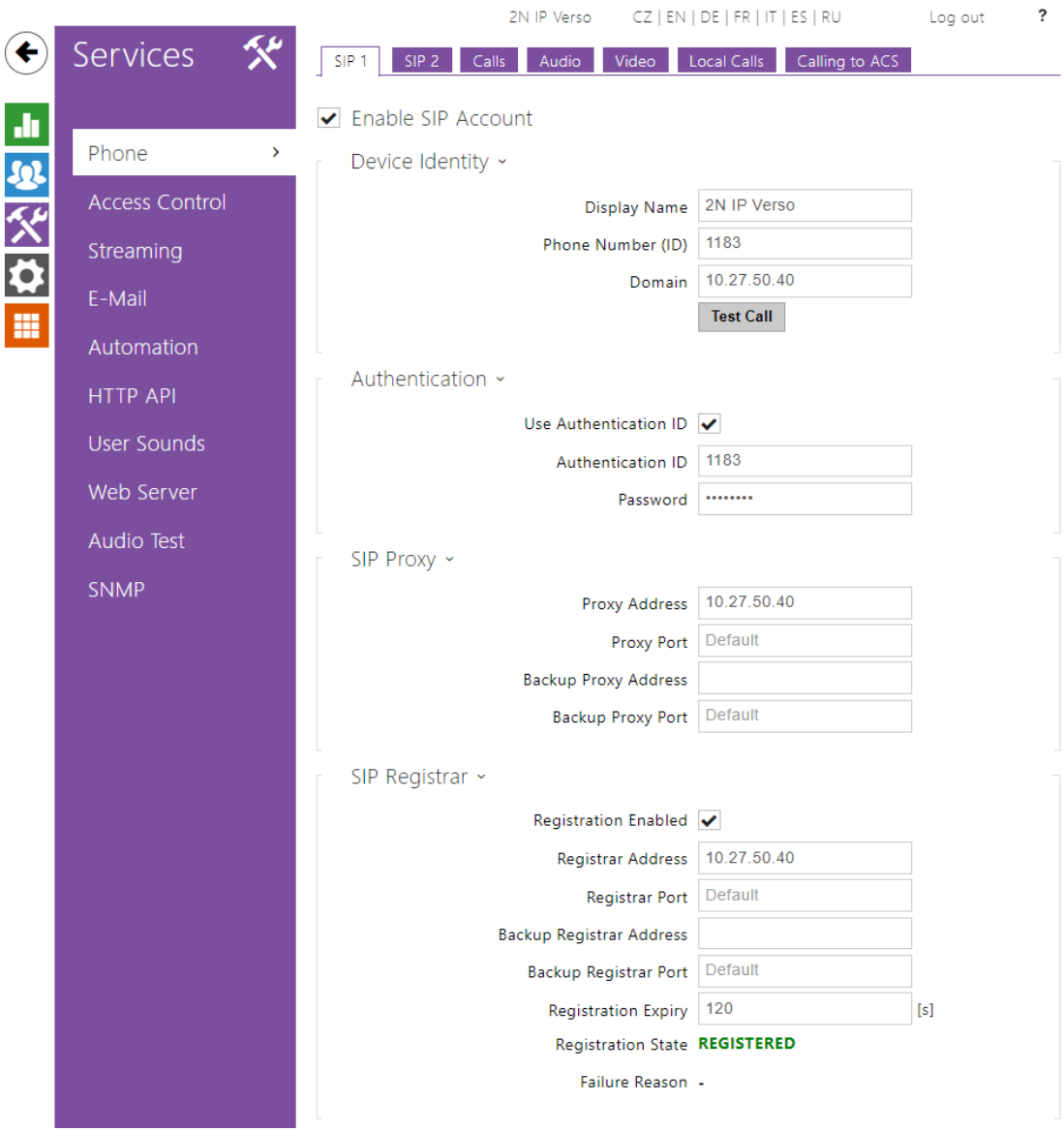

NetStar 10.27.50.40

- IP address: 10.27.50.40 (Domain, Proxy Address, Registrar Address)
- Port: 5060 (Proxy Port, Registrar Port) *optional
- Phone Number: phone number of your choice (Phone Number (ID), Authentication ID, Password)

2N IP Phone D7A

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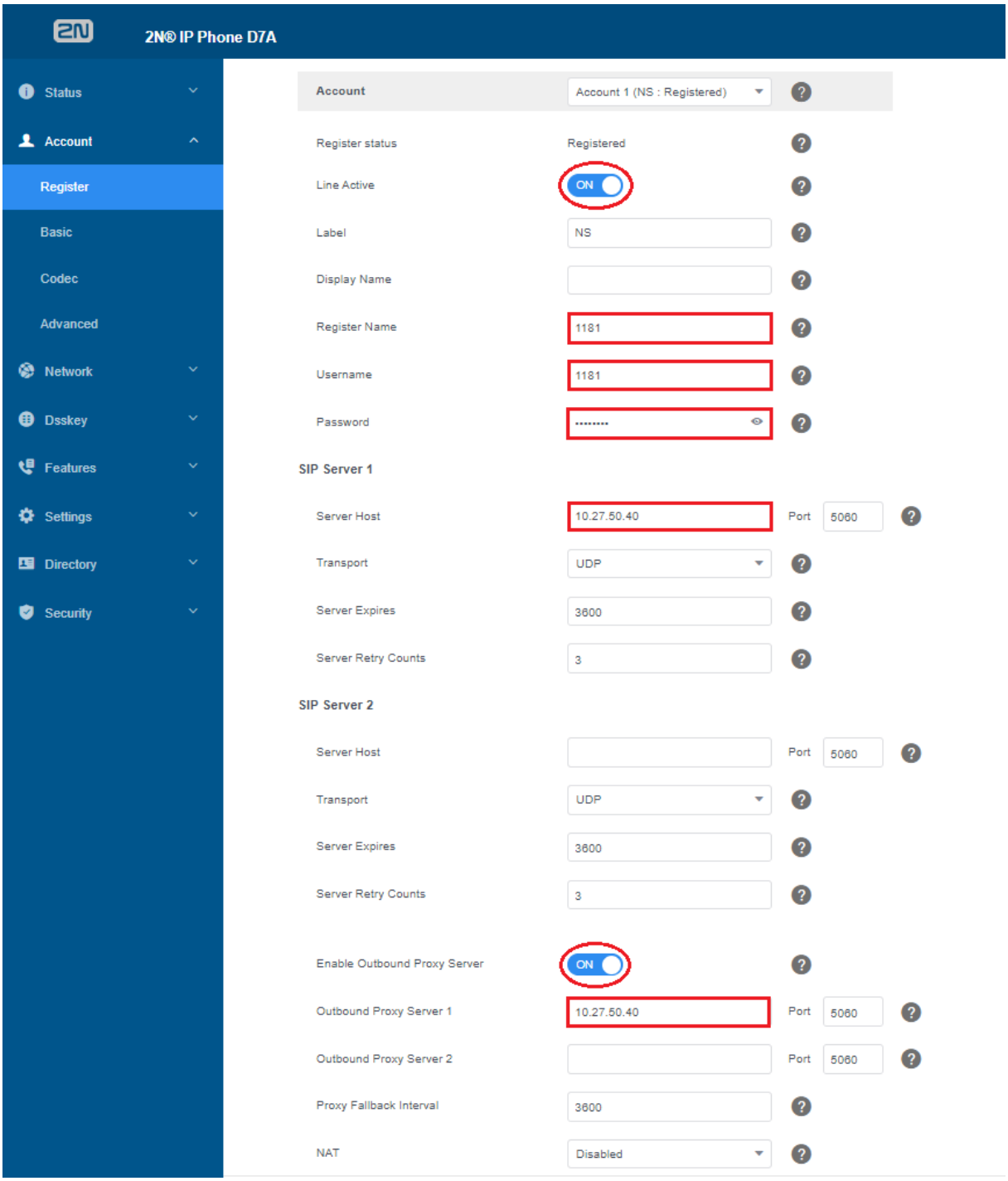

On the Client side you have to fill out the following parameters:

We will be using NetStar Proxy as an example again.

- IP address: (Server Host, Outbound Proxy Server 1)
- Phone Number (Register Name, Username, Password)

Don´t forget to activate the line at the bottom and then save configuration using Confirm button:

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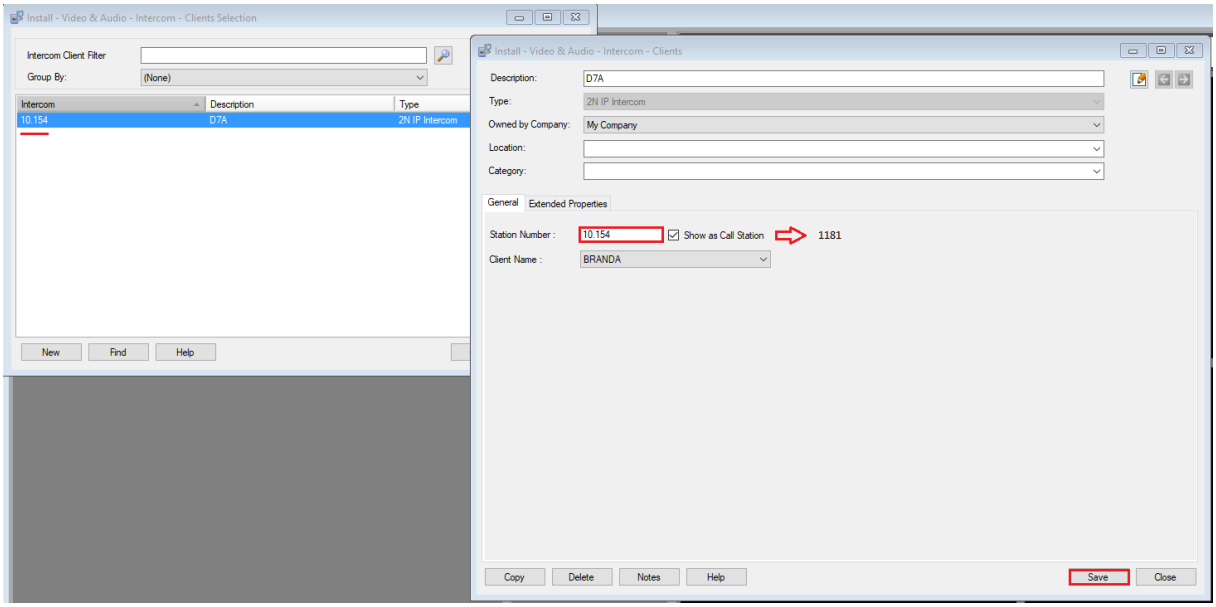
Symmetry

Change Station Number of Client

1. Go to Install > Intercom > Clients

2. Select your added Station



3. In General tab you have Station number filled like for example 10.154.

4. You should change it from 10.154 (last two digits of Client's IP Address) to phone number which you register your Client to within SIP Proxy (eg. 1181).

Use SIP Proxy

Last step to enable calling via SIP Proxy is to turn on „Use SIP Proxy" in Symmetry software.

You will do it as follows:

Symmetry > Install > Intercom > Extended Properties > Station Settings > Use SIP Proxy

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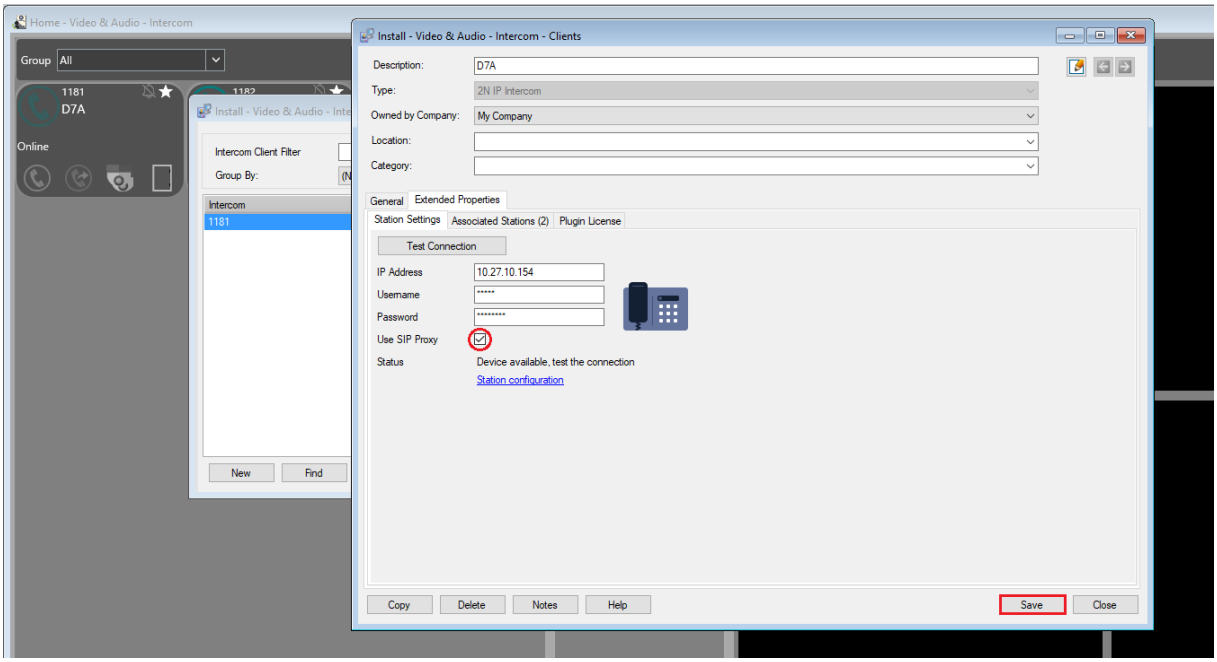
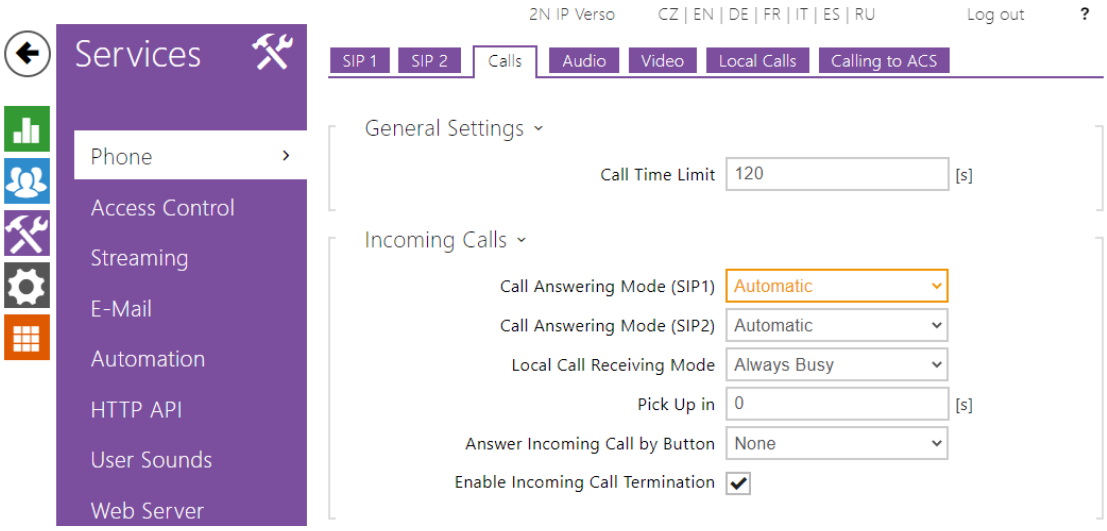


Make sure to check „Use SIP Proxy" button and don't forget to Save.

Now you are all set to call via SIP Proxy.

Call Answering Modes:

Regarding to answering the calls on 2N Intercom (Station) you have more options to choose. Other then Manual Pickup, you can also use Automatic – if you want that Intercom to pick up calls automatically, change Call receiving mode (SIP1) to Automatic in Services > Phone > Calls.



Call Button User Assignment:

In order to assign the user to the 2N Intercom's physical button there are two steps you need to do. First you have to create a user in 2N Intercom's directory. It will be the Client (2N IP Phone D7A). Second you have to assign this user to the button so if anyone press the button it will call to the Client (2N IP Phone D7A) within Symmetry.

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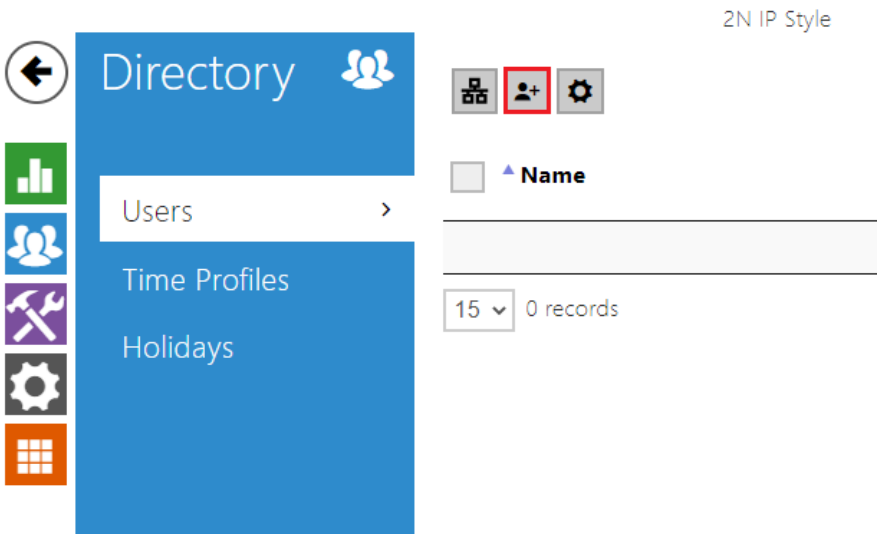
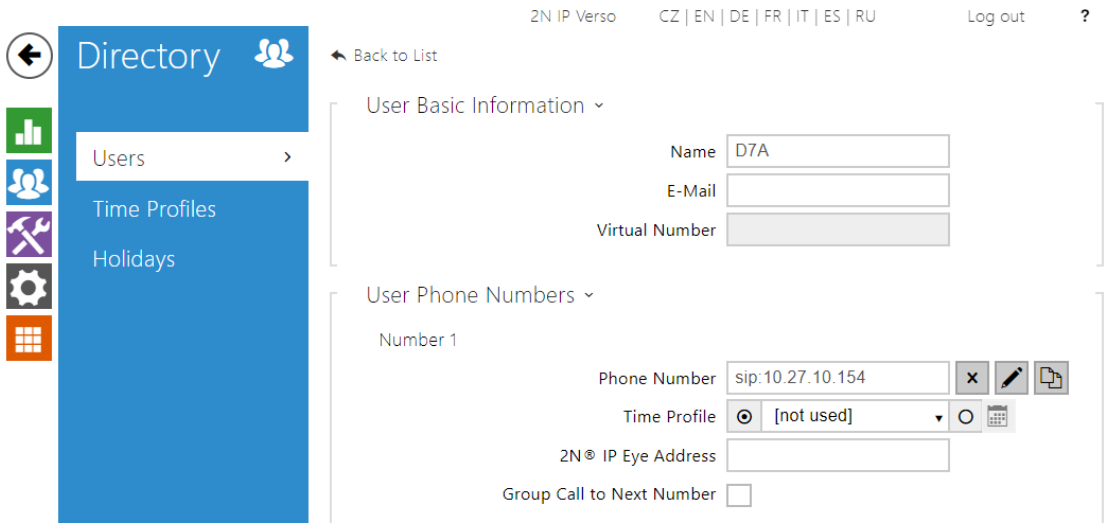
1. Creating user in the Directory



In Directory / Users click on „Create new user" button.

NOTE: here you will be adding your Client phone number based on whether you want to call using direct SIP call or using SIP Proxy.

A) Direct SIP Call:



B) SIP Proxy:

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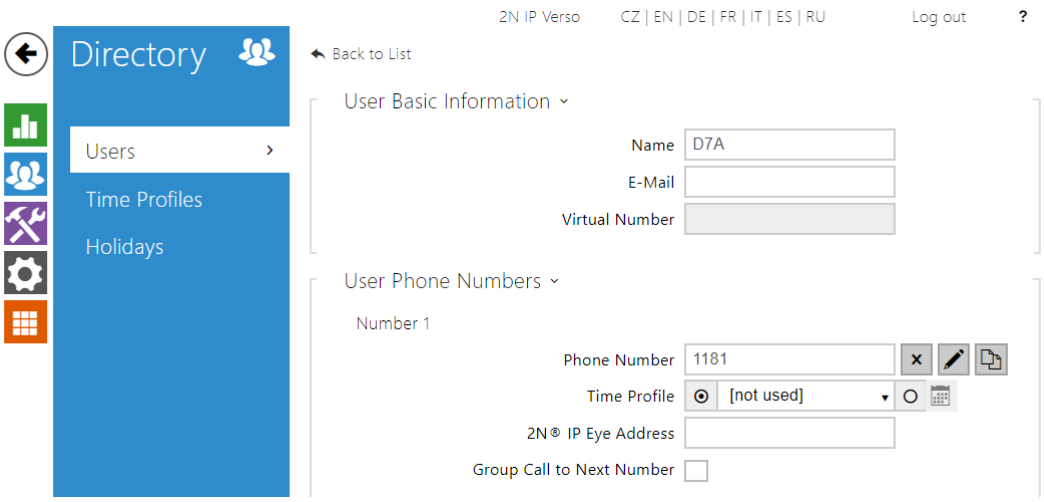

In both cases hit the Save button at the button at the bottom of the page.

2) Assigning User to the Intercom's button at Hardware > Buttons > Quick Dial Buttons.

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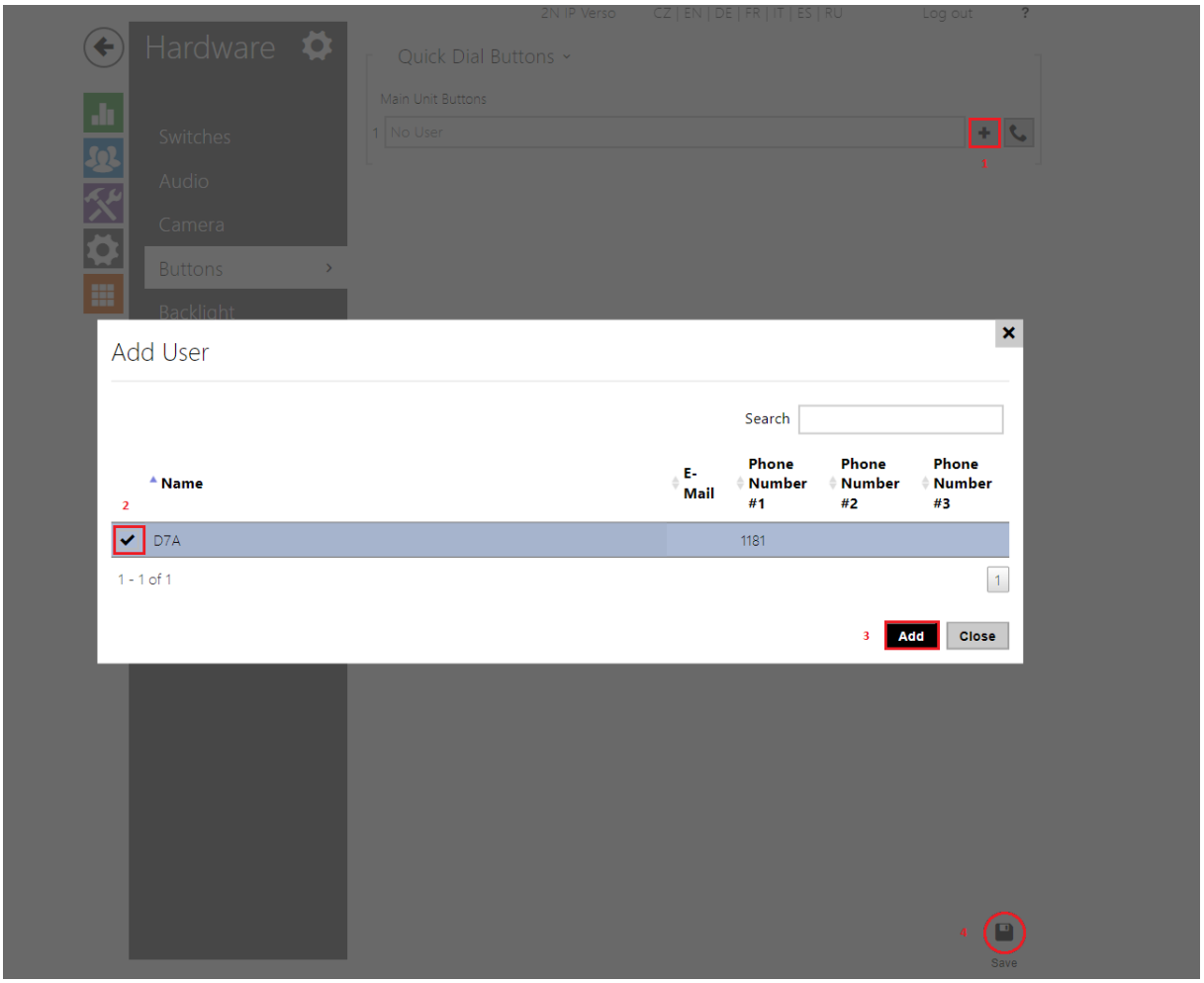


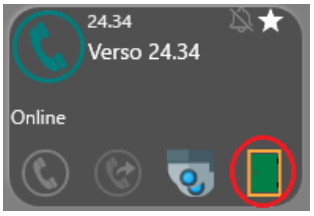
Just do these simple steps to assign a User to the button.

Now you have everything prepared to add your 2N IP Intercom to the Symmetry as a Station.

When properly added to the Symmetry it will work so that when anyone presses the button on 2N IP Intercom it will automatically call your Client (2N IP Phone D7A) within Symmetry so you can control it. More about it later in the manual.

Door opening

You can open the door from Symmetry's GUI by clicking a Door icon.



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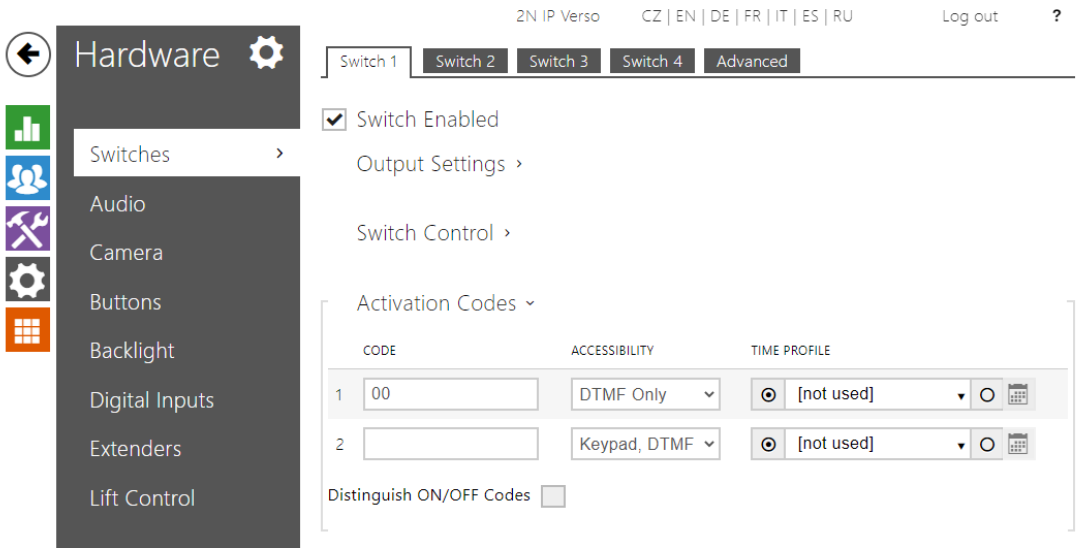
In order to send the Intercom's Switch Code, this code must be first defined in the Intercom's configuration.

Hardware > Switches > Switch # > Activation Codes

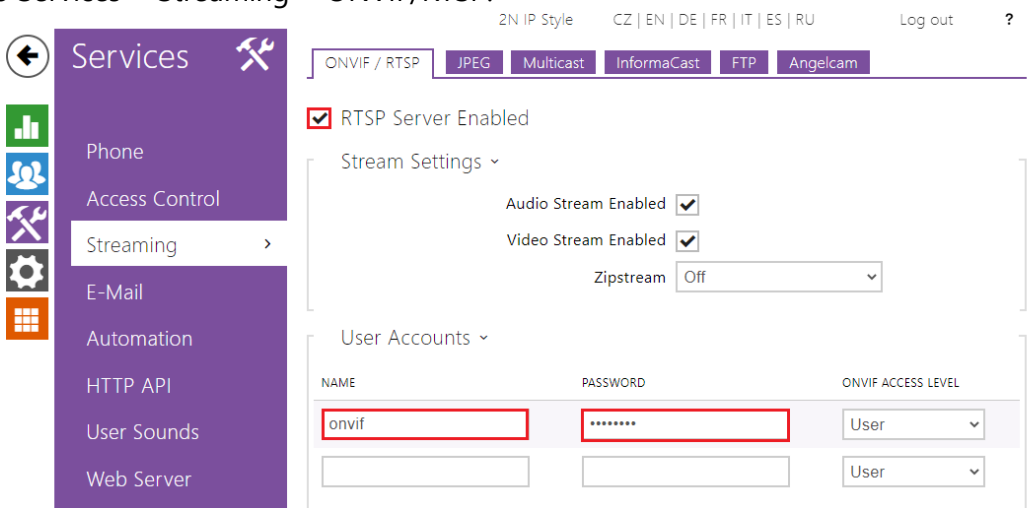


ONVIF/RTSP Streaming Enable

If your 2N IP Intercom have a camera you can stream the video in Symmetry.

1. First you have to set it-up in 2N Intercom web interface.
2. Second you have to set it-up in Symmetry software **See: Adding & Associating Camera**

Go to Services > Streaming > ONVIF/RTSP.



Enable RTSP Server (Checkbox).

In User Accounts fill-in your credentials. You will use these credentials in Symmetry when adding and associating a camera. **See: Adding & Associating Camera**

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Save the setting by the Save button on the bottom of the page.

Your 2N IP Intercom is now ready to be added with a camera.

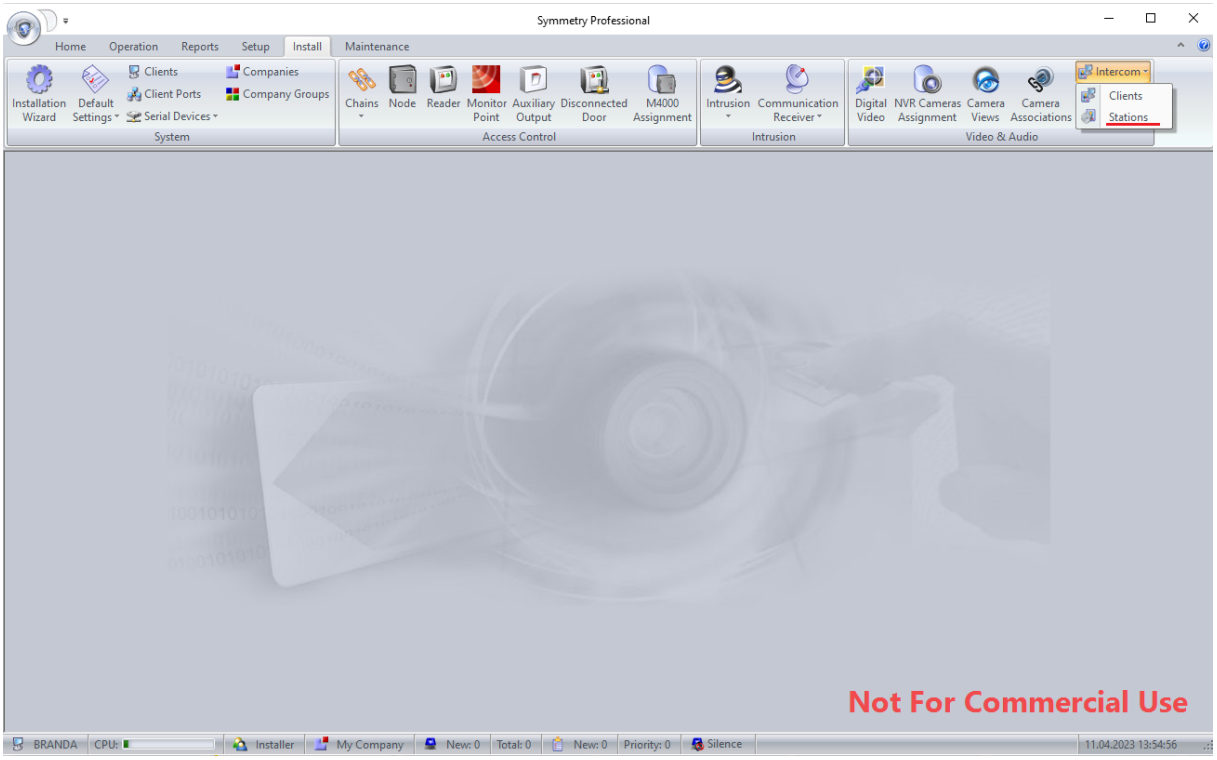
Now you have to set-up Camera in the Symmetry software.

See: Adding & Associating Camera

Adding Stations

You can add every 2N IP Intercom with the 2N Plugin for Symmetry. 2N Indoor Units and 2N Access Units can´t be added as a Station. We will be using 2N IP Verso and 2N IP Style in this document. Both have a camera. This is how you add 2N IP Intercom into the Symmetry. Let's add 2N IP Verso as an example.

1. From the upper menu choose Install tab.
2. Choose Intercom on the right side and then Stations.



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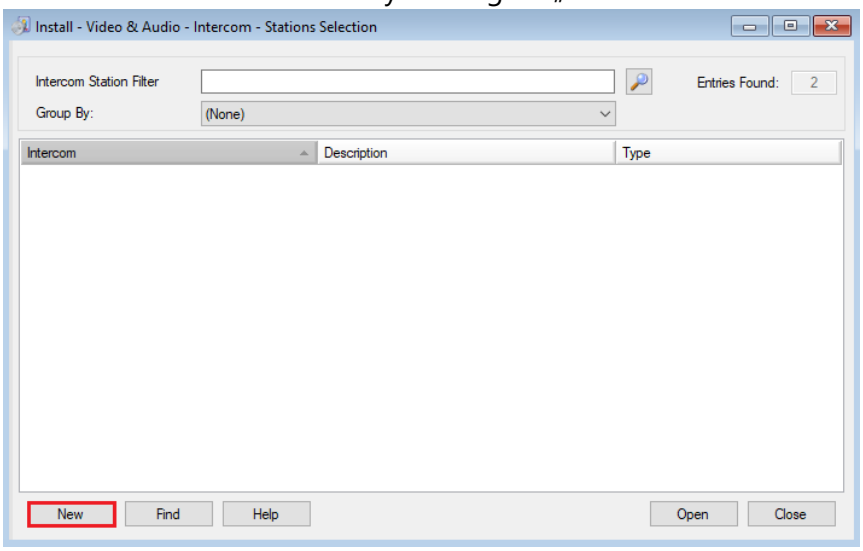
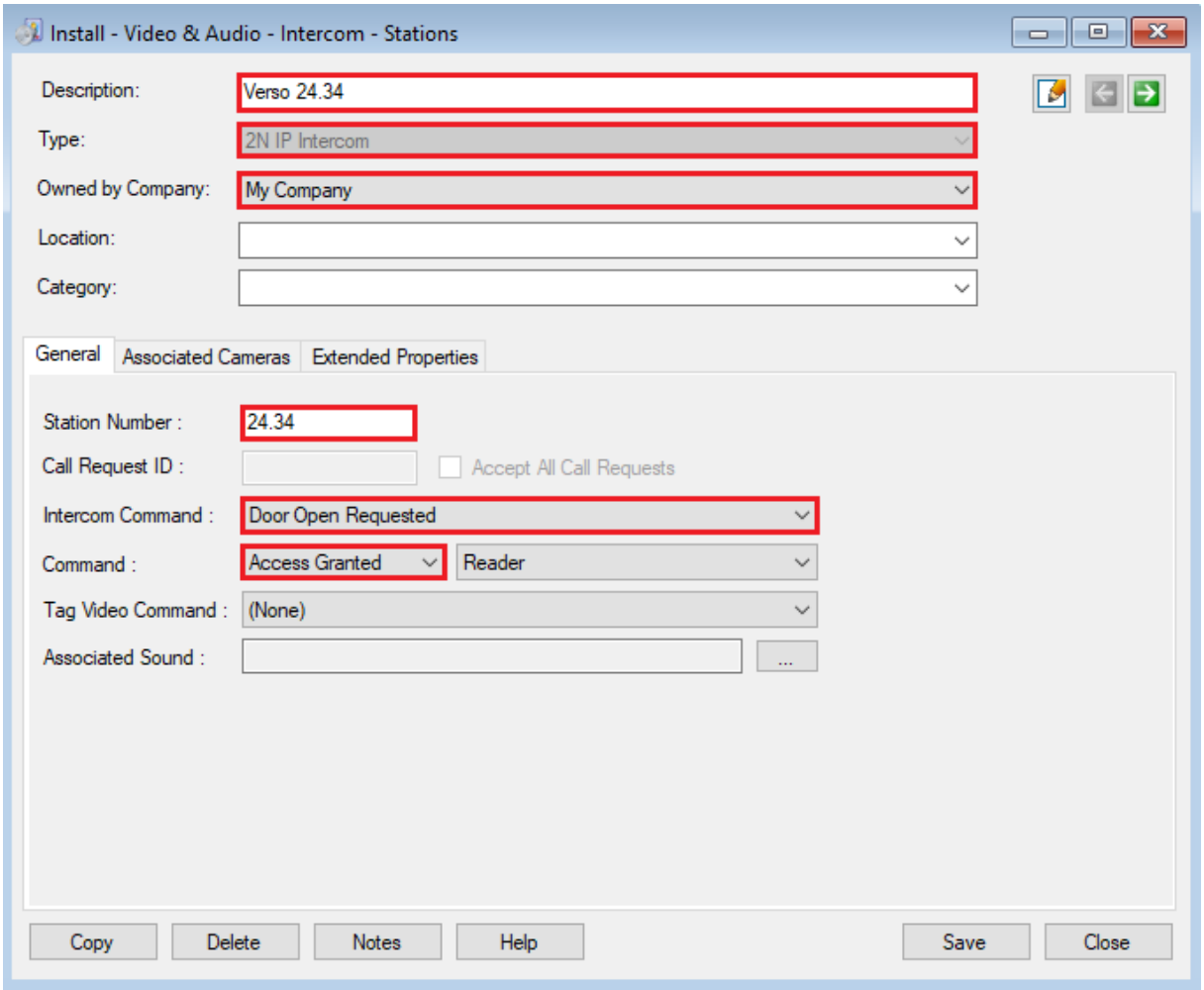
3. You can add new devices by clicking on „New“ button.



4. In General tab fill out following fields:



**There are two options for Station number of the Client:*

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A) if you are calling as a direct SIP call you can use your own ID as a Station Number

B) if you are calling via SIP Proxy you'll use your registered number (eg. 1181 for example)

See: Calling Set-up

Note: Intercom Command: „Door Open Requested" and Command: „Access Granted" will be used when you connect a lock to be able to open the door right from Symmetry GUI

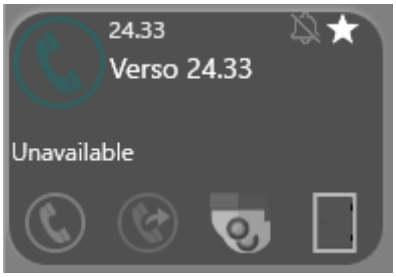
See: Door Opening

5. Click the Save button at the bottom of the page

Now your 2N IP Intercom will be displayed in Symmetry's Home – Vide & Audio – Intercom window:

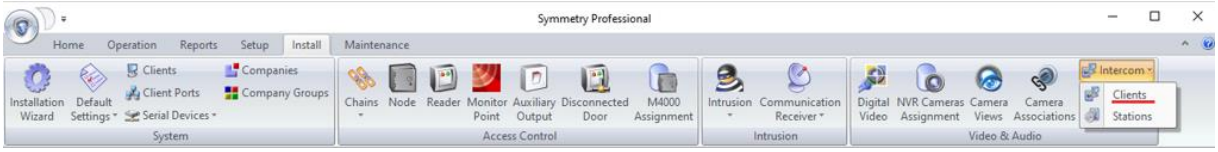
You can view it from: Home > Video & Audio > Intercom

It will be „Unavailable" at the moment.



That is because there is still one more step to do in order to completely add a 2N Intercom to the Symmetry system and to make it functional.

From the top menu select Install > Intercom > Clients again.



Double click your Client device. In Extended Properties choose Associated Stations.

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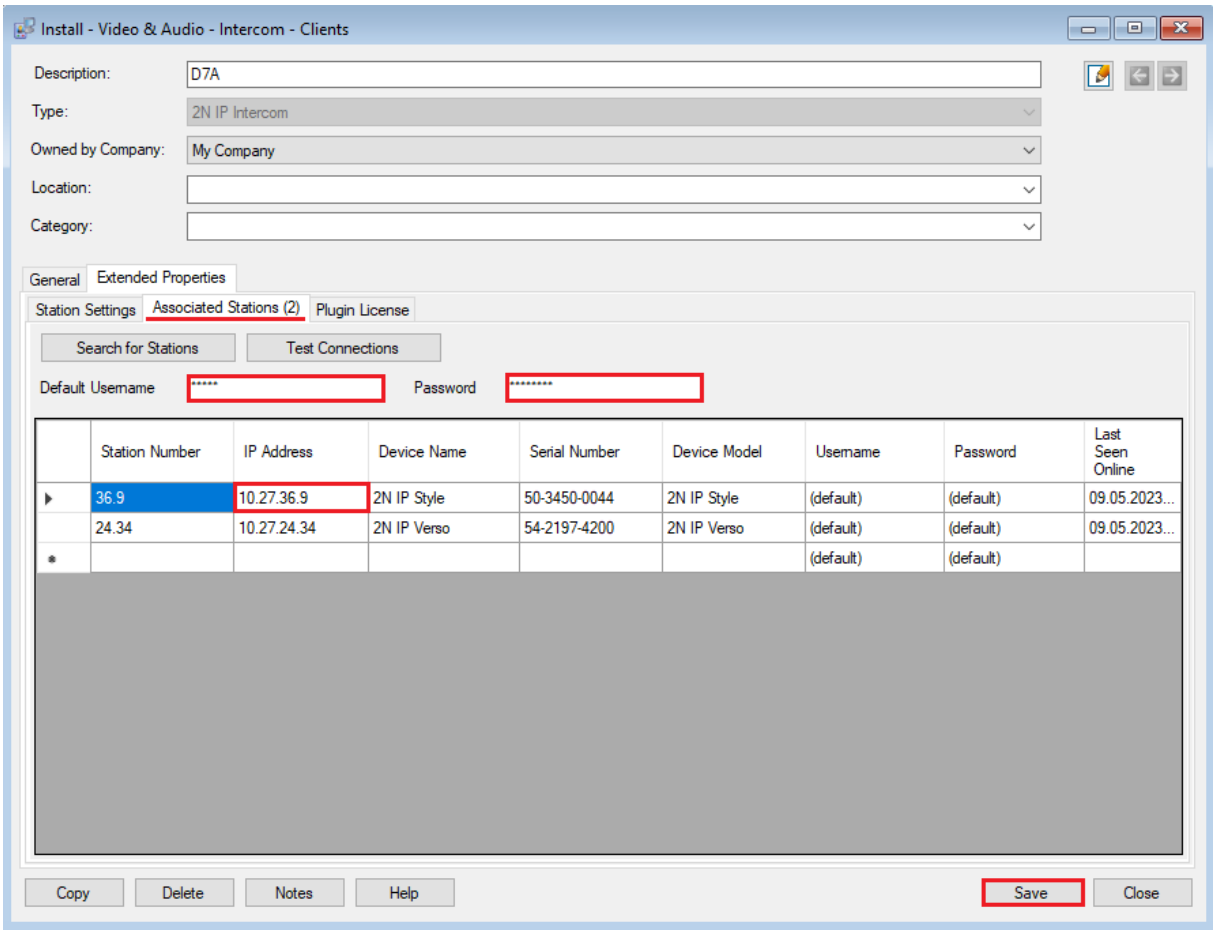
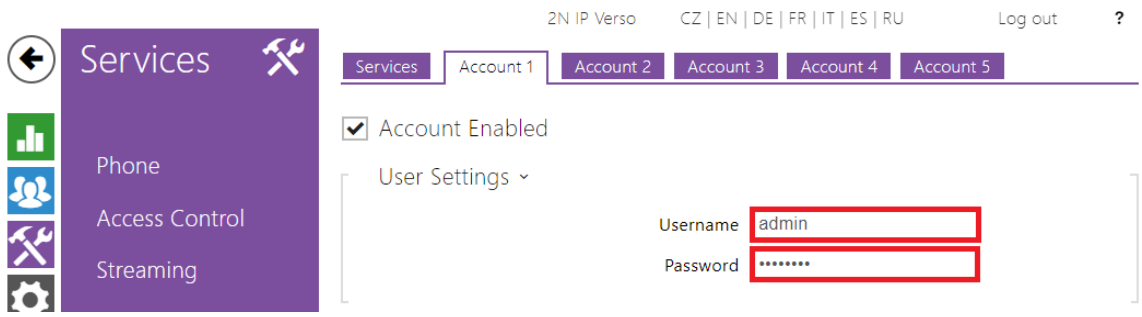


In Default Username and Password tab you will fill out your 2N IP Intercom credentials for HTTP API Account you had filled in when you setting up 2N IP Intercom here:

See: HTTP API Activation

When your HTTP API Credentials are the same for each of your 2N IP Intercoms then you just need to fill it once in Default Name and Password fields (see picture below).

Otherwise, when you have different HTTP API Credentials for each 2N IP Intercom you have to fill it separately for every individual 2N IP Intercom in a Username and Password column.



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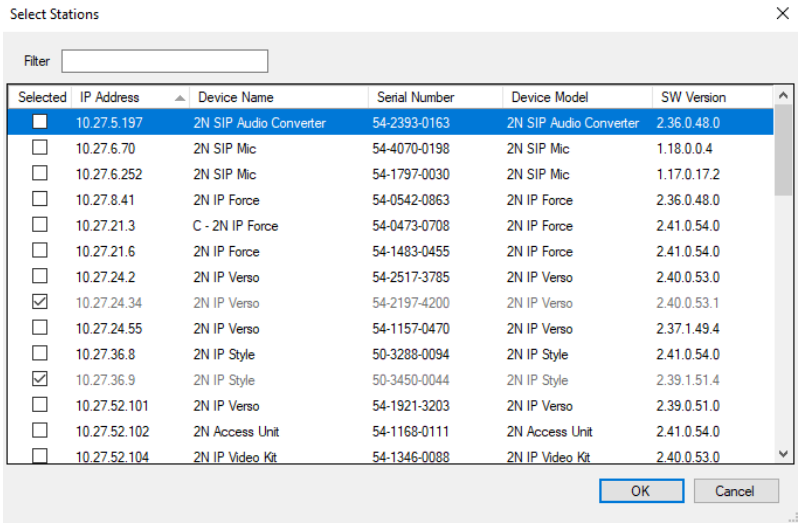
Associating Station to the Client

There are two options to associate a Station to the Client:

1) Using Search for Stations button:

- a new window with a list of available 2N devices will open

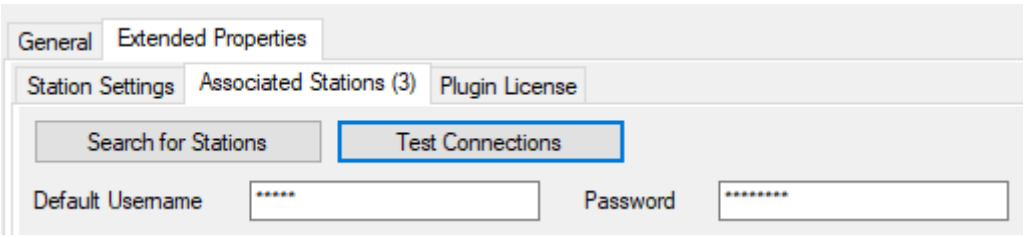


- you can select the one you want to add by checking it and click OK
- device will be automatically added to the Associated Stations list
- you can see that already added devices are greyed out and cannot be unselected
- you just have to fill out Station Number which will be empty and had warning symbol displayed
- Station number will be same as Station Number you fill in before when you adding a New Station (eg.24.34 for example) to properly associate

2) Manually add by typing in IP Address:

- you can type your devices IP Address into the IP Address column
- if the device is online Device Name, Serial Number and Device Model will be filled automatically
- again you just have to fill out Station Number which will be the same as Station Number when adding the device before

In both cases you can check the connection by the Test Connections button.



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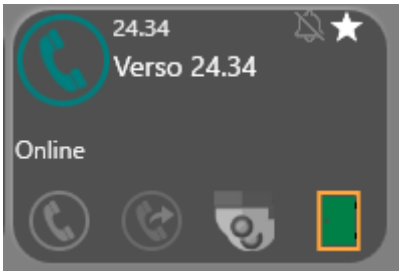
To delete a Station, you need to select a particular row and press delete button on your keyboard.

	Station Number	IP Address	Device Name	Serial Number	Device Model	Username	Password	Last Seen Online
	36.9	10.27.36.9	2N IP Style	50-3450-0044	2N IP Style	(default)	(default)	11.05.2023...
▶	24.34	10.27.24.34	2N IP Verso	54-2197-4200	2N IP Verso	(default)	(default)	11.05.2023...
*						(default)	(default)	

Now when you save you settings your device should appear „Online". You can view it in Symmetry's Home – Video & Audio – Intercom window.



Adding & Associating Camera

If your device has a camera you can view the Live Preview from that camera in Symmetry.

First make sure that you have properly set-up the 2N IP Intercom for Streaming.

See: Enable ONVIF RTSP Streaming

Then you can continue to setting-up the Camera in Symmetry Software. There are four steps in order to add a Camera to the Symmetry.

Digital Video

1. From Install go to Digital Video.
2. From the list on the left choose ONVIF Camera.
3. Click the New Button to create a new Camera instance.
4. A new Window „Install – Digital Video Device [ONVIF Camera] will open.
5. Fill up the following parameters (Description , Network Address, Username + Password).
6. *Description have the same ID as your Station Number for better clarity (eg. 24.34)
7. Click the Connect button – your camera should appear „Online".
8. In Media tab > Media Profiles > Life: > Choose Profile_H264 (Video: H264, Audio: G711).
9. Hit the Save button to save your settings

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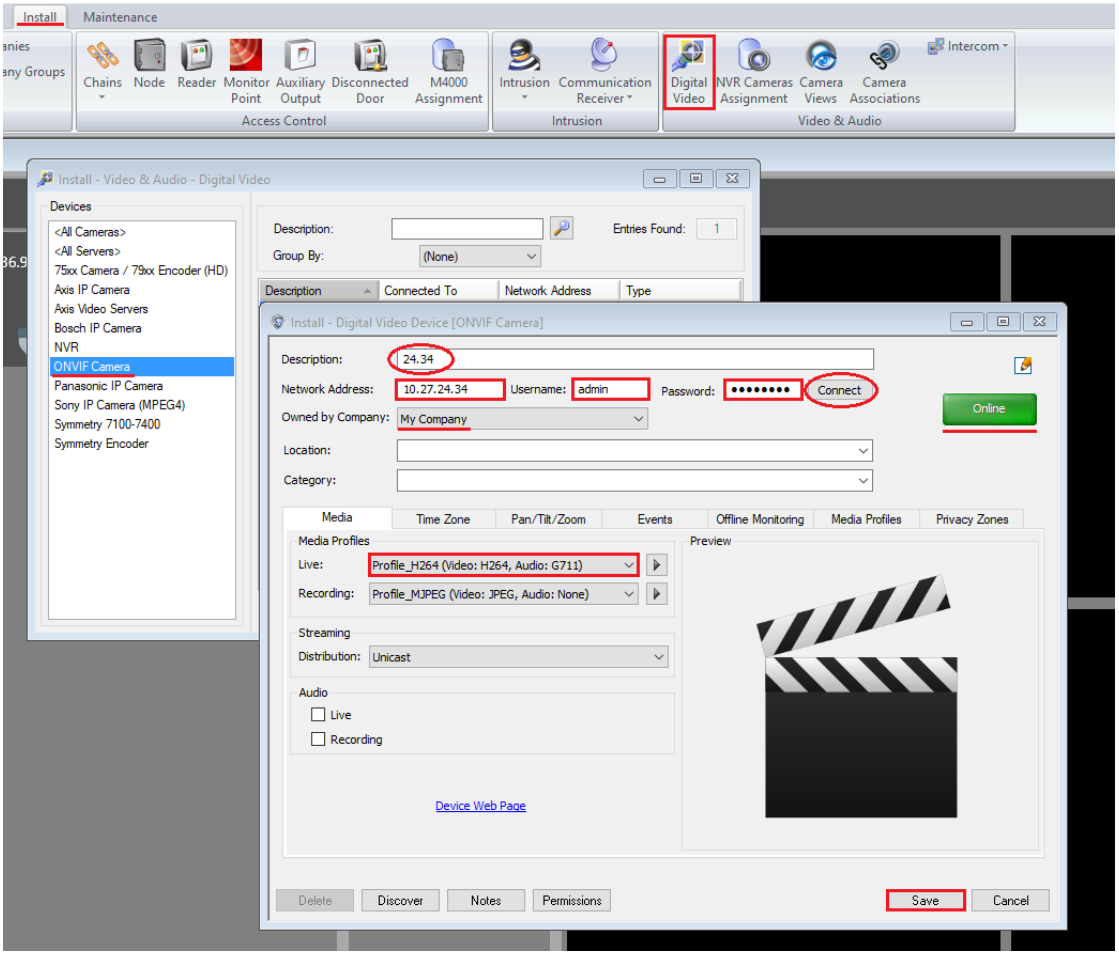

Camera Association

1. From Install go to Camera Association
2. Choose your Camera (eg. 24.34) you add in section before.
3. Click Open button / double-click it.

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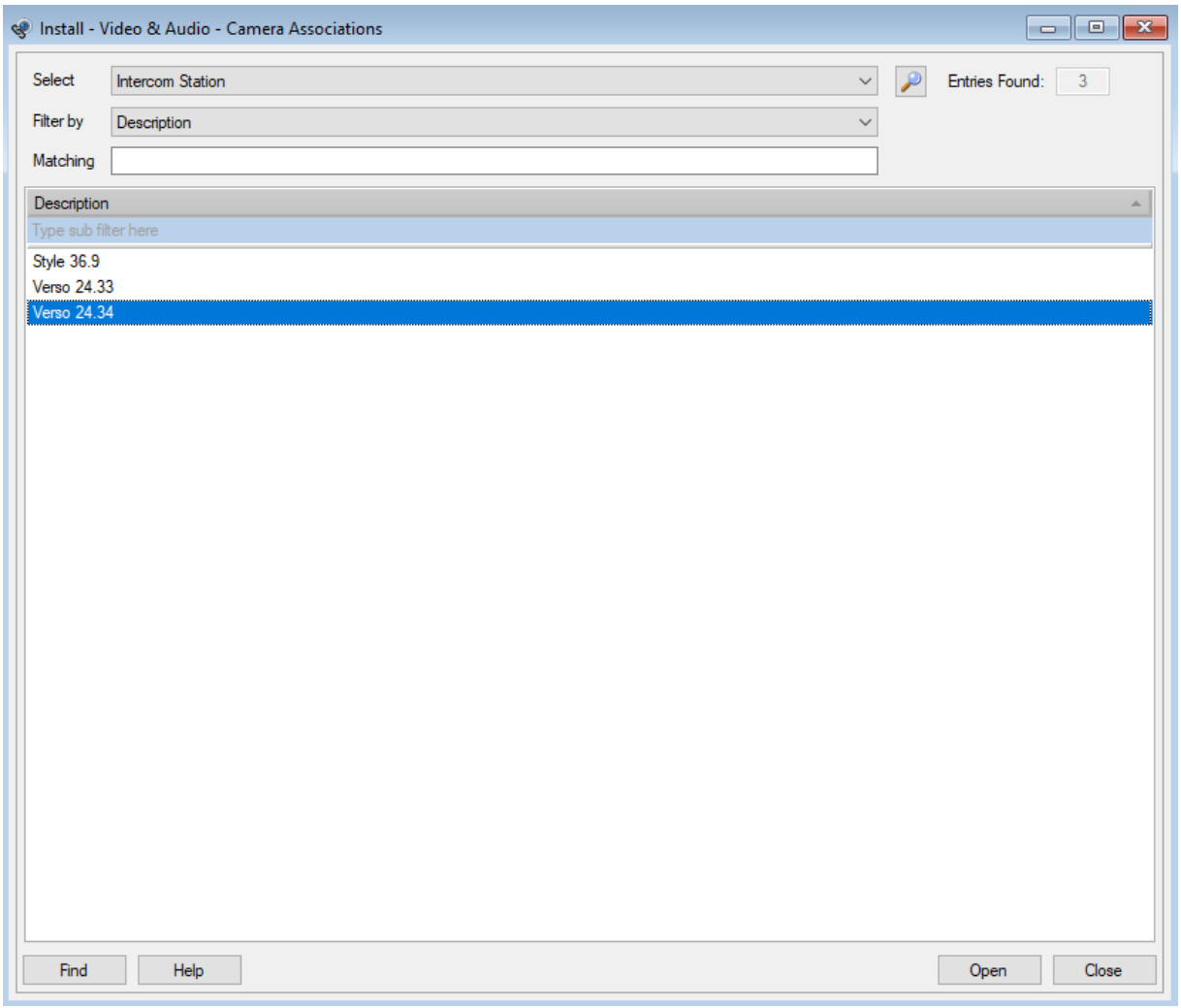

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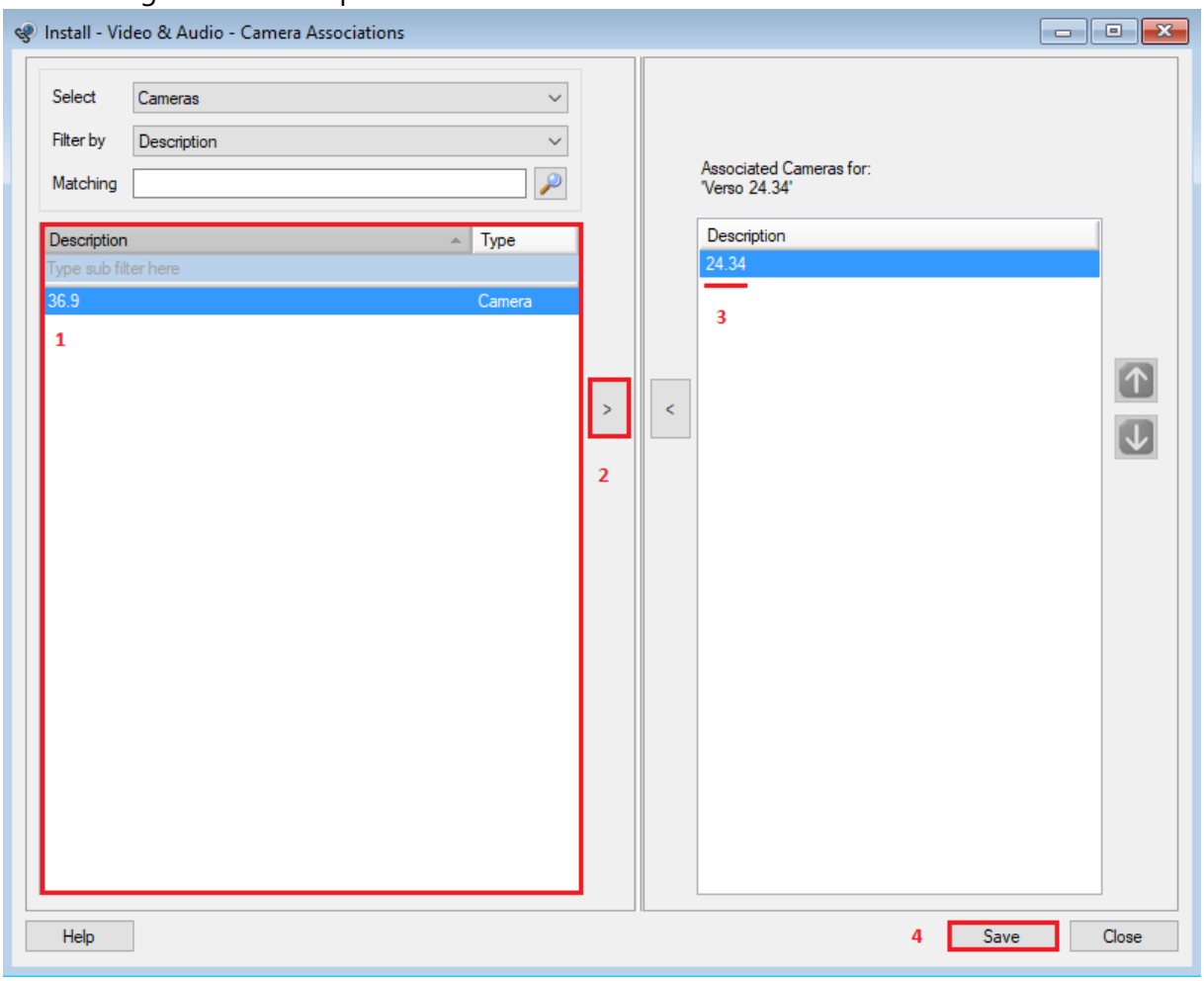
4. Following window will open:



5. First you choose your camera (24.34) from the left part of the window.

6. Click the „>“ button – this will move the camera to the right part of the window.

7. This means it’s now Associated with „Verso 24.34“ 2N IP Intercom.

8. Hit the Save button.

Camera Views

From Install go to Camera Views

1. Click the New button to add a new Camera View

2. At the top of the window in Description field fill in 24.34 as an ID

3. On the left side choose your desired Camera (24.34)

4. Click „>“ button to add it to the right side

5. Hit the Save button

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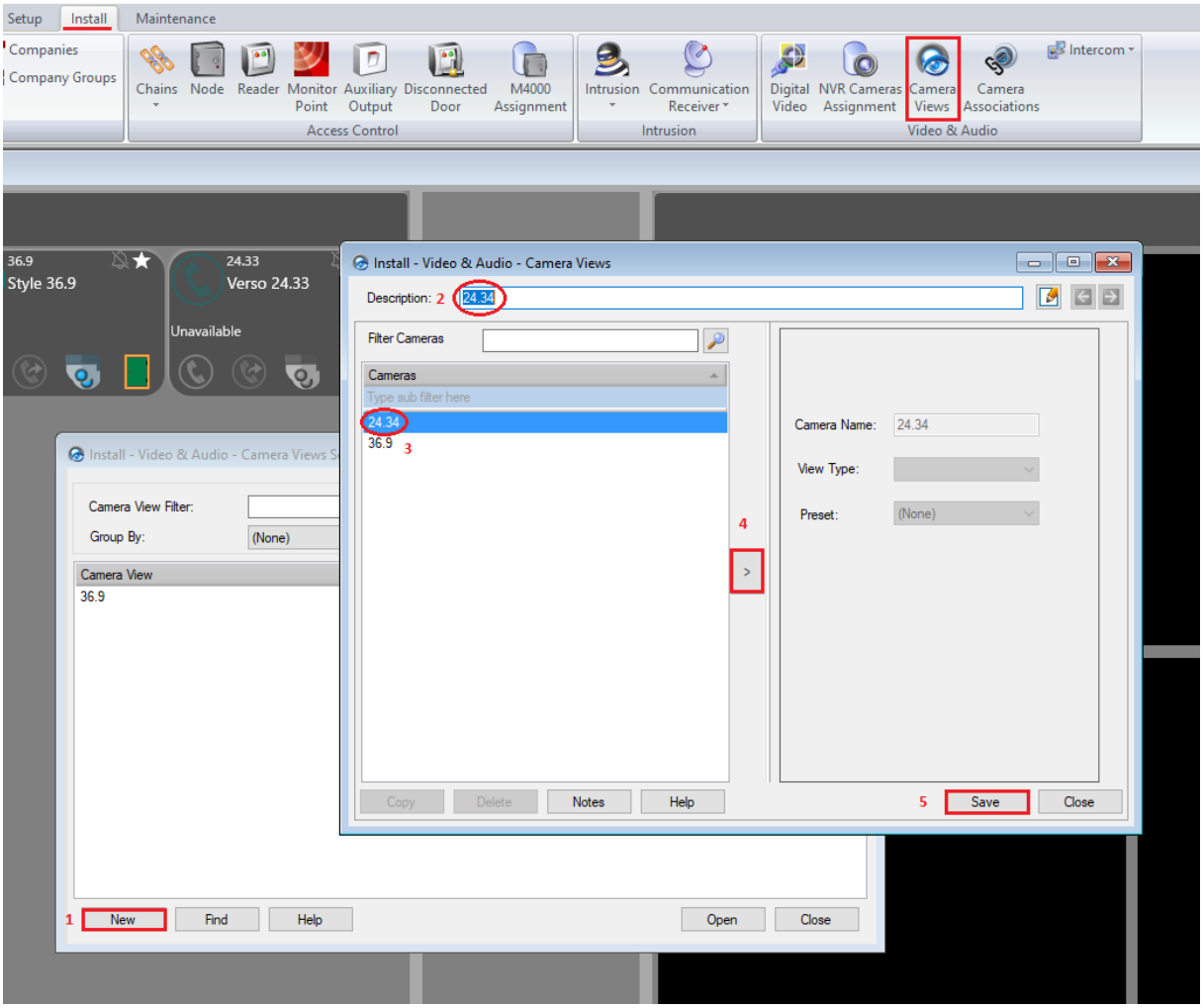

Add the Camera to the Intercom Associated Cameras

From Install go to Intercom > Stations.

1. Choose desirable Device (24.34) and click Open / double-click

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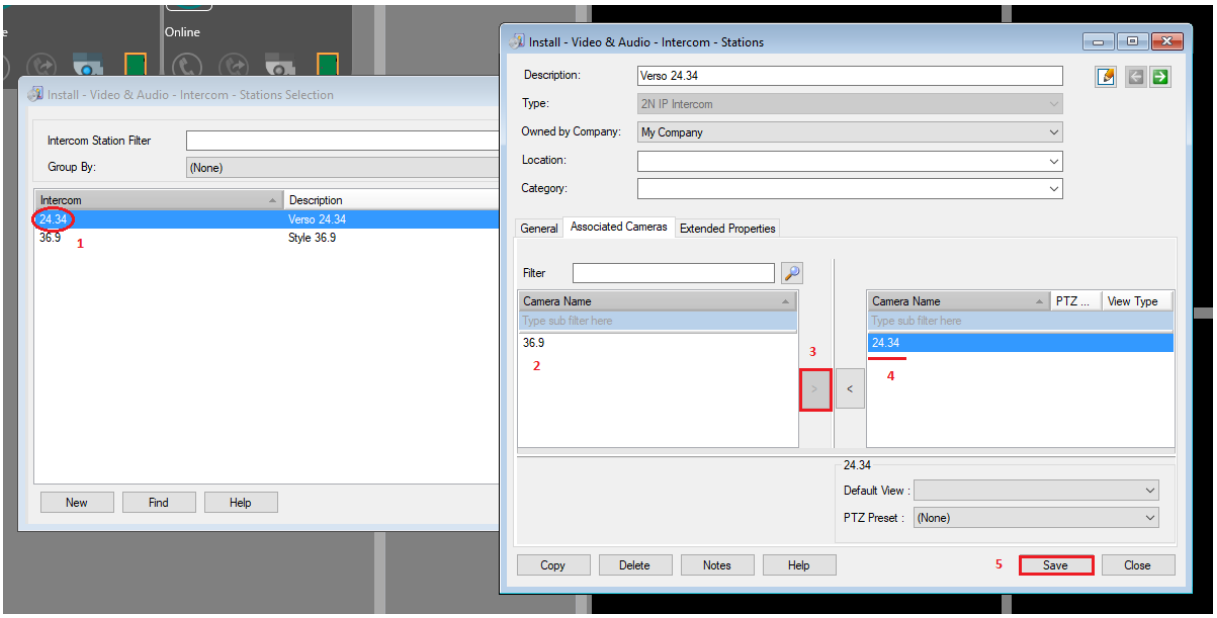

2. Select Camera 24.34 from left side

3. Again move it to the right side using „>“ button

4. Camera 24.34 is on the left side which means it will be associated to the Verso 24.34

5. Hit the Save button

Now you can see that the small Camera icon on your 2N Verso which was grey before is now coloured.

Which means that your Camera of 2N IP Verso is now successfully added and associated to your device so you can use it in Symmetry.

You can test it by clicking the „Play associated video device“ button.

Video preview from your device will play in the grid on the right side.

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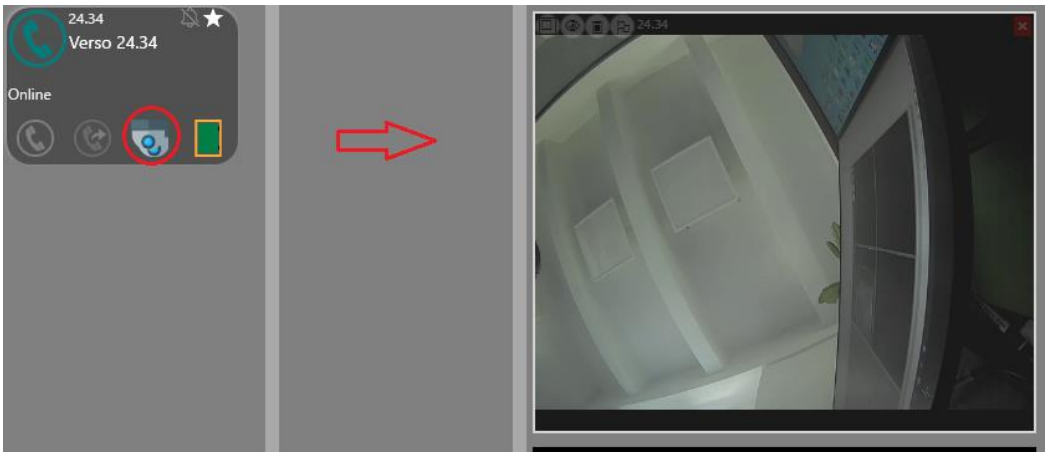
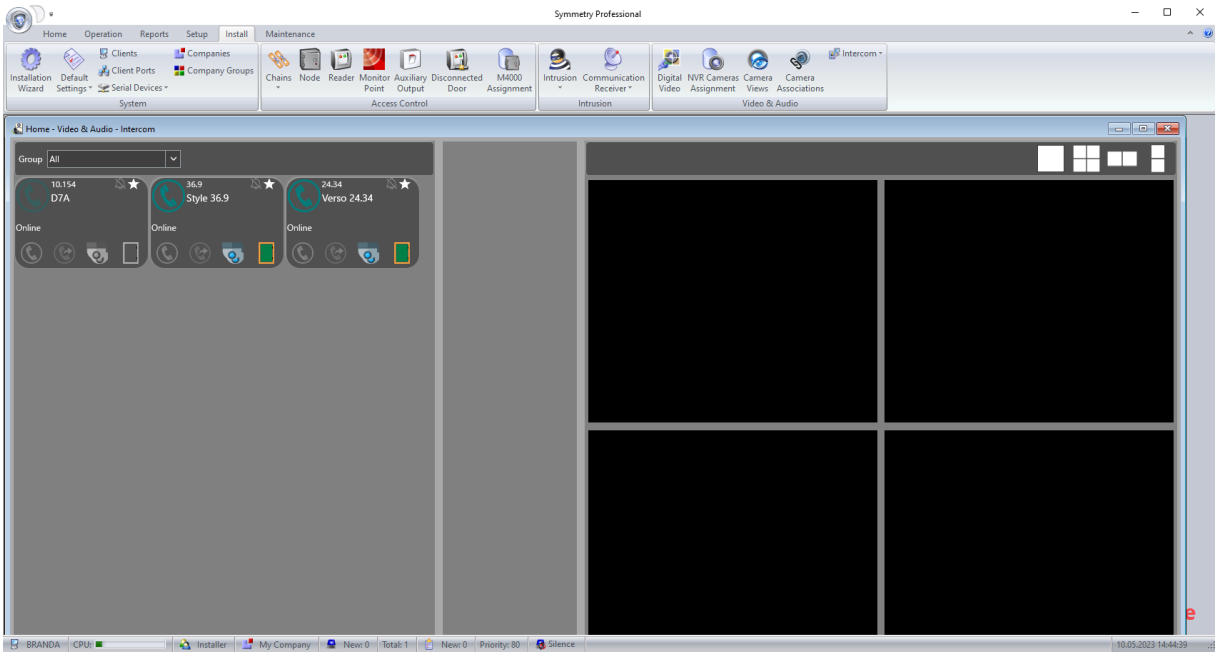


In final state – when you have your Client and Station/s add properly and your camera (if present) added and associated, your Home – Video & Audio – Intercom should look like following:



From Symmetry software with **2N Plugin for Symmetry** you are now able to make / end a call from Symmetry, view the associated camera and control the door.

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Troubleshooting

Visit 2N FAQ section for dealing with troubleshooting issues: FAQ

In case of difficulties setting up the 2N IP intercom, kindly follow this link for intercom detailed installation and configuration manuals, including additional information.

To create a ticket with 2N Technical Support team, please use this form. 2N Technical Support is also available during business hours through live chat with on call technicians directly on the company website at 2n.com.

For further assistance with Symmetry software please find out **Intercom Management Installation and User Guide, Issue 9.3.0v1** in Symmetry software installation folder.

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