SIP Extension Compatibility Report

2N IP Verso
SIP Video Modular Doorphone
SV9100 / SL2100

NEC Enterprise Solutions has performed Interoperability Testing with the Platform(s) and the Device listed above on the date specified on the individual Compatibility Report.

Please always refer to the latest edition of a specific Compatibility Report on BusinessNet before considering connection.
If a Device is no longer mentioned in the Index and/or the Compatibility Report is not available then the Compatibility Report has been withdrawn and connection will no longer be supported by NEC Enterprise Solutions.

IMPORTANT – A specific Device may not necessarily be available in every territory of the EMEA Region. Verification should be obtained before proceeding.

Test Completion Date:	1st Match 2021
Manufacturer:	2N
Model:	IP Verso
Software Level:	2.31.0.40.5
Web Site	https://cie-group.com
NEC	
System Tested:	SV9100 / SL2100
Software Version:	10.60.55/ 3.00.02

Please refer to the following page(s) for further Information and Configuration Notes.

Description of SIP Extension

2N® IP Verso is an elegant and reliable intercom equipped with lots of useful functions. Thanks to SIP support and compatibility with major brands of PBX manufacturers, it can benefit from using VoIP networks. 2N® IP Verso can be used as a door or special purpose intercom for office buildings, residential areas and other applications.

Advantages of Use

- Elegant design
- Weather resistant
- Various modes of installation (flush, surface, plasterboard)
- Sensitive microphone and loud speaker
- Both-way audio communication – acoustic echo cancellation
- Integrated colour HD camera with wide-angle lense and hidden night vision
- Selectable number of quick dial buttons with nametags and backlight
- Optional numeric keypad with backlight
- Option to have multiple modules of the same kind – for example, card reader for both entering and leaving the building
- Integrated switches of electric locks with wide setting options
- Optional integrated RFID card reader module
- PoE or 12 V DC power supply
- Configuration using web interface or dedicated PC application
- VoIP standard SIP 2.0 support
- 10 000 Phone Book positions
- 20 user time profiles
- Video codecs (H.263, H.263+, H.264, MPEG-4, MJPEG)
- Audio codecs (G.711, G.729, G.722, L16/16kHz)
- HTTP server for configuration
- SNTP client for time synchronisation
- RTSP server for audio and video streaming, ONVIF compatible
- SMTP client for email sending, Picture to Email feature
- TFTP/HTTP client for automated firmware and configuration upgrade and update

We have tested the 2N IP Verso SIP Door Entry using a Single Button.

Recommended Software Versions

SV9100:

CCPU Version 10.60.55 / PC Pro Version 10.52.56

SL2100

CCPU Version 3.00.02 / PC Pro Version 3.00.01

Licensing requirements

SV9100:
1 x System Port license required
1 x IP Advanced License

SL2100:
1 x SIP Extension License

System Configuration

The SV9100 CP20 CPU Card must have an IPLe VoIP Daughter Board installed.

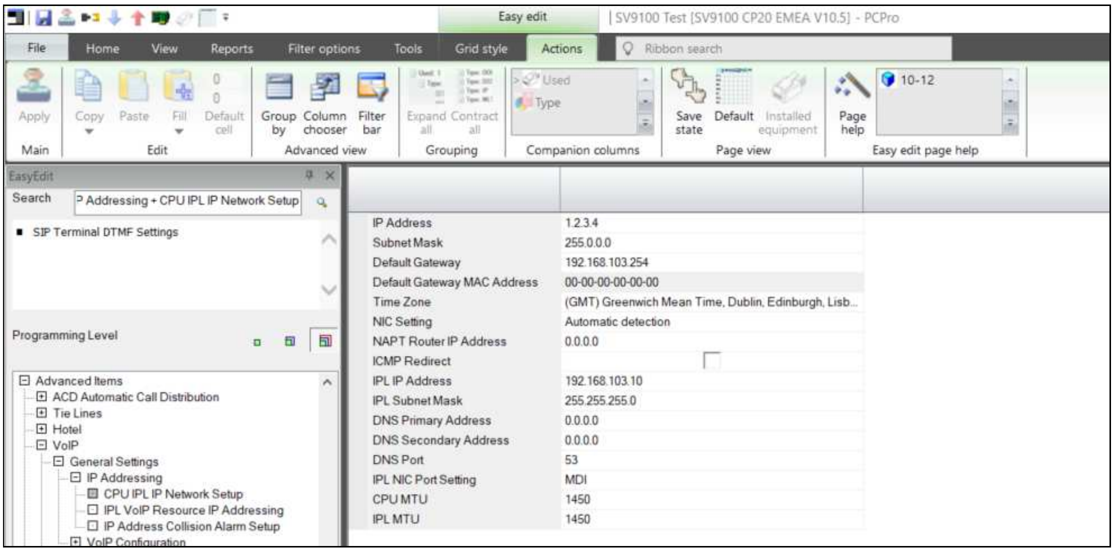
The SL2100 has VoIP support as standard called "Embedded VoIP" with an Option to install the VoIP DB card for further support enhancements. Tests performed in this guide was using the Embedded VoIP option.

System Programming

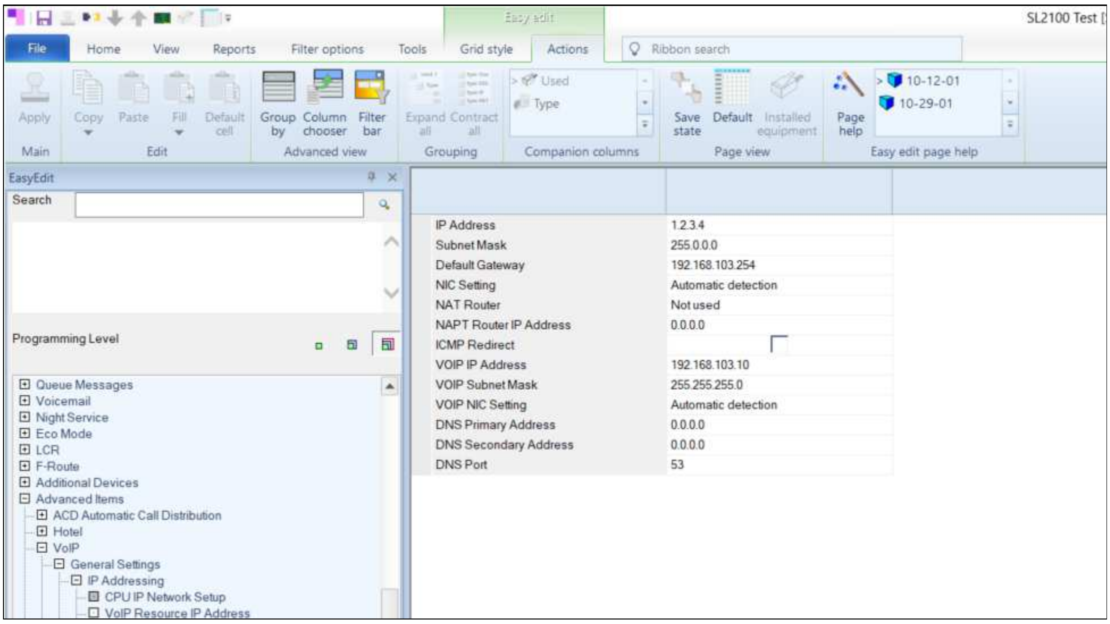
The following items should be changed – all other items are considered irrelevant and as such left as default. Screenshots are for example purposes only and will have been taken from the PBX under test but will apply to the other PBXs listed on the cover of the Compatibility Report.
Only differences in programming will be documented where necessary.

Advanced Edit	PRG	Item	Setting
Advanced Items + VoIP + General Settings + IP Addressing + CPU IPL IP Network Setup	10-12-02	Default Subnet Mask	Set according to customers network requirements
	10-12-01	IP Address	Must be in a different network range to IPLE IP Address (10-12-09) Must not be set as 0.0.0.0
	10-12-03	Default Gateway	Set according to customers network requirements
	10-12-09	IPLE/VOIPDB IP Address	Set according to customer's network requirements.
	10-12-10	IPLE/VOIPDB Subnet Mask	Set according to customers network requirements

SV9100

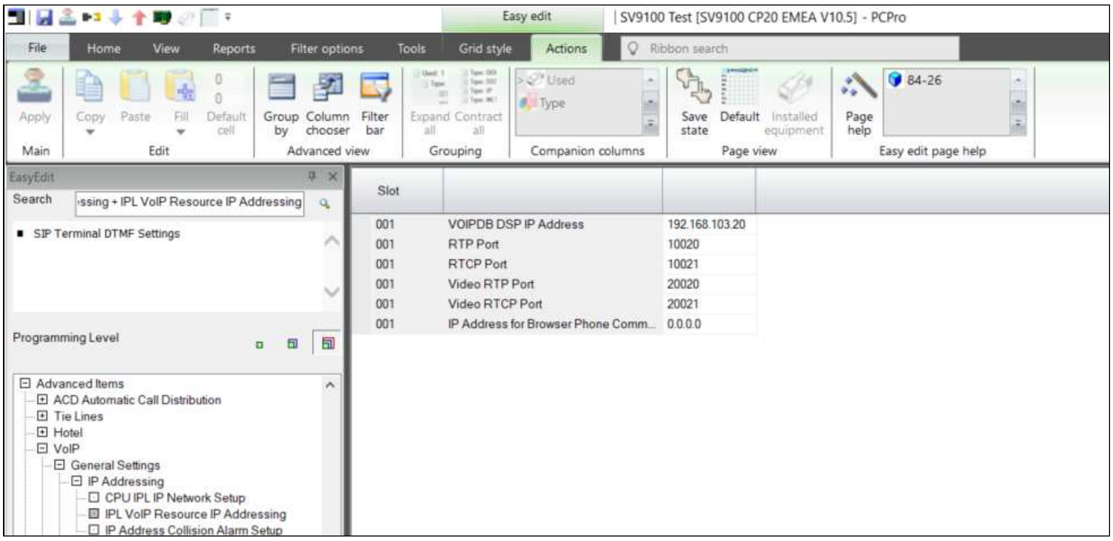


SL2100

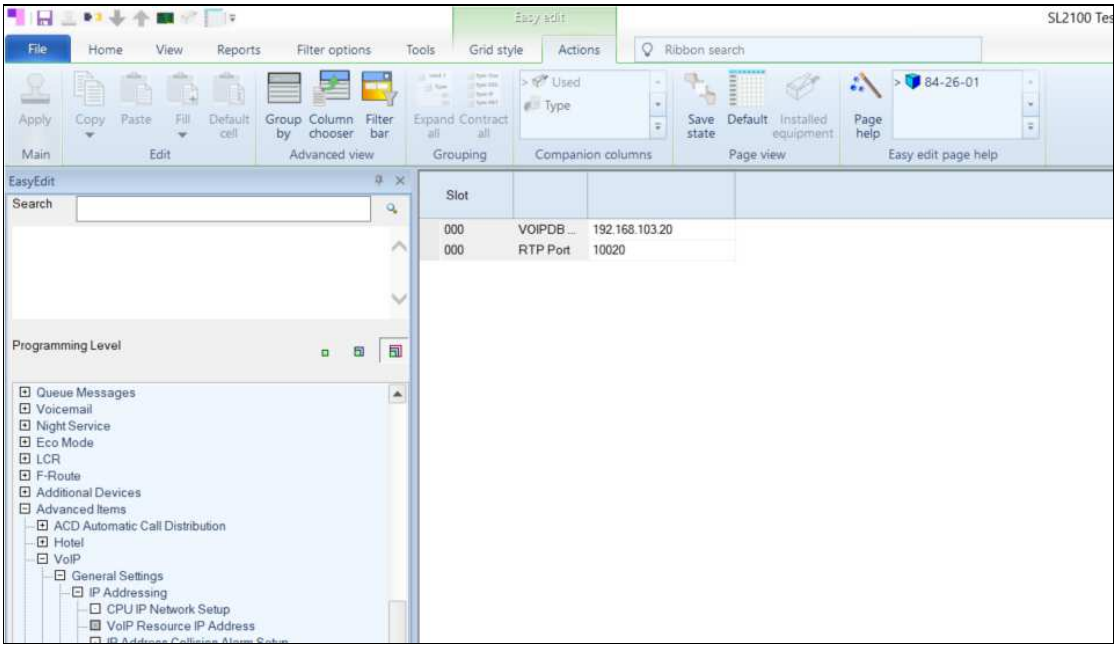


Advanced Edit	PRG	Item	Setting
Advanced Items + VoIP + General Settings + IP Addressing + IPL VoIP Resource IP Addressing	84-26-01	VoIP Gateway IP Address	Set according to customers network SV9100 & SL2100 requirements. This requires 1 x static IP address for the DSP resources

SV9100

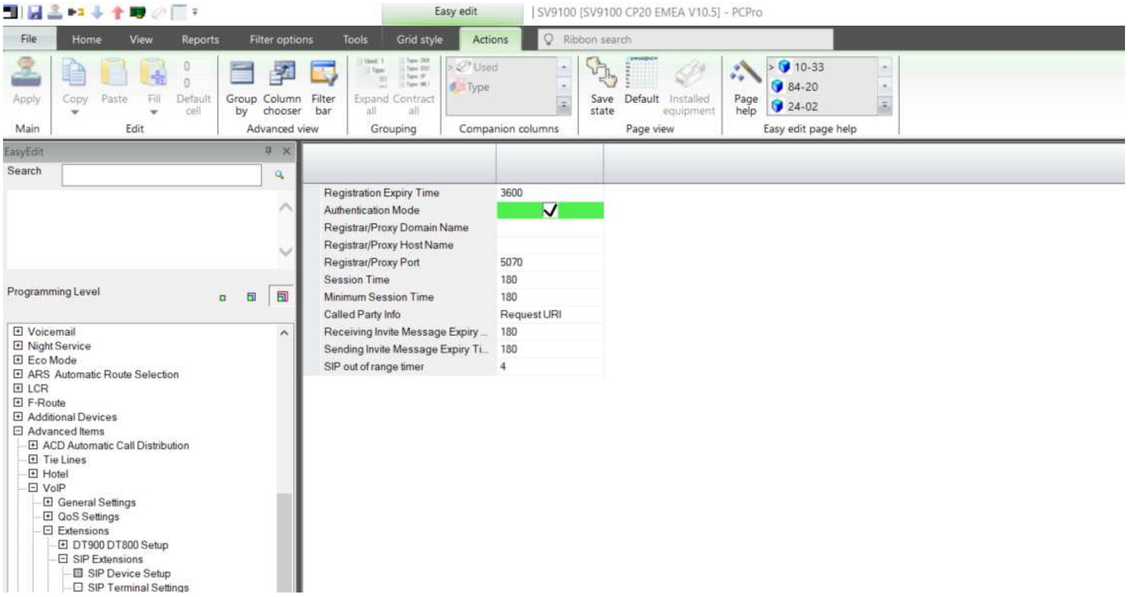


SL2100

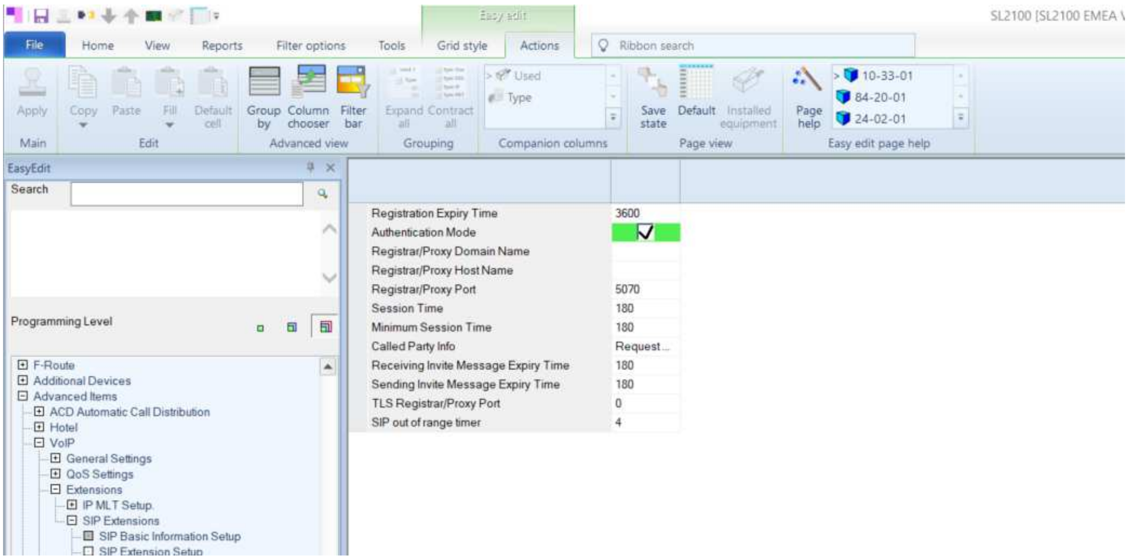


Advanced Edit	PRG	Item	Setting
Advanced Items + VoIP + Extensions + SIP Extensions + SIP Device Setup	10-33-01	Registration Expiry Time	Leave set as default to **3600**. The 2N Verso will re-register every 120s set by device.
	10-33-02	Authentication Mode	Set to **Enabled** for Authentication using User name and Password.
	84-20-01	Registration Port	Default Port is **5070**

SV9100

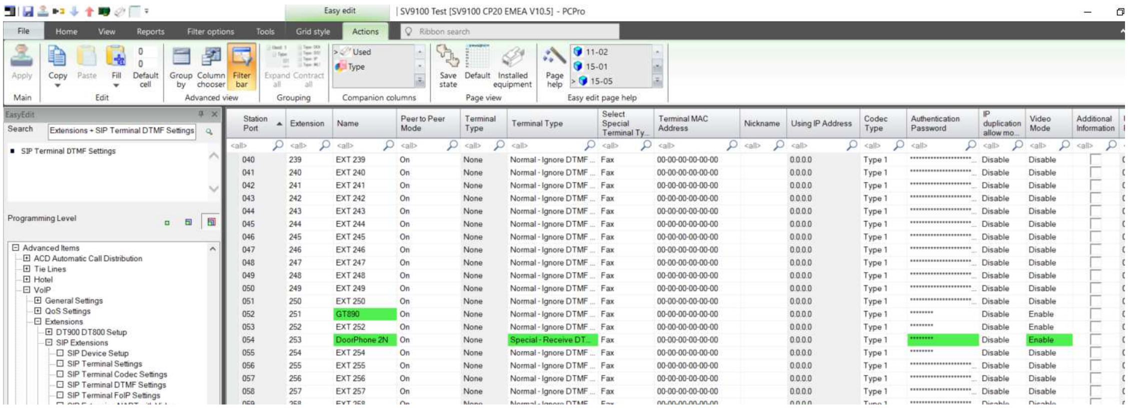


SL2100

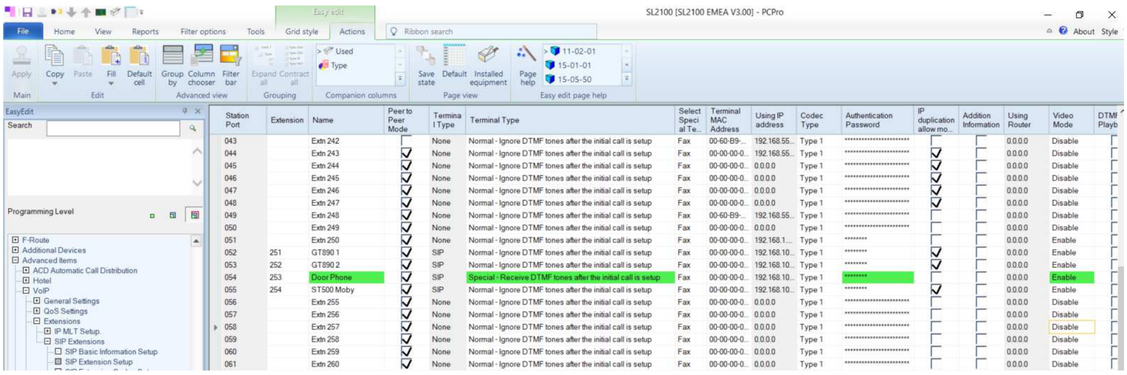


Advanced Edit	PRG	Item	Setting
Advanced Items + VoIP + Extensions + SIP Extensions + SIP Terminal Settings	11-02	Extension Number	SIP Extension must register to an un-carded Extension Port.
	15-01-01	Extension Name	Enter the Name of the device.
	15-03-03	Terminal Type	Set to **Special - Receive DTMF tones after the initial call is setup**
	15-05-15	Codec Type	Default setting is Type 1.
	15-05-16	Authentication Password	Enter an 8 digit Password that will be used for Authentication when the device registers.
	15-05-43	Video Mode	**Set to Enabled**

SV9100

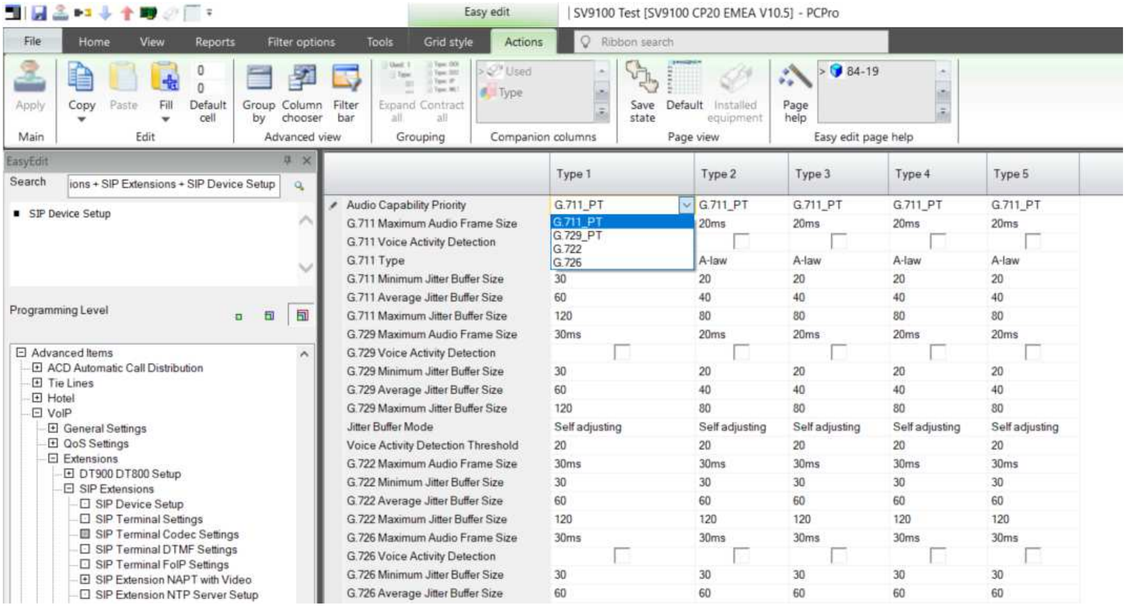


SL2100

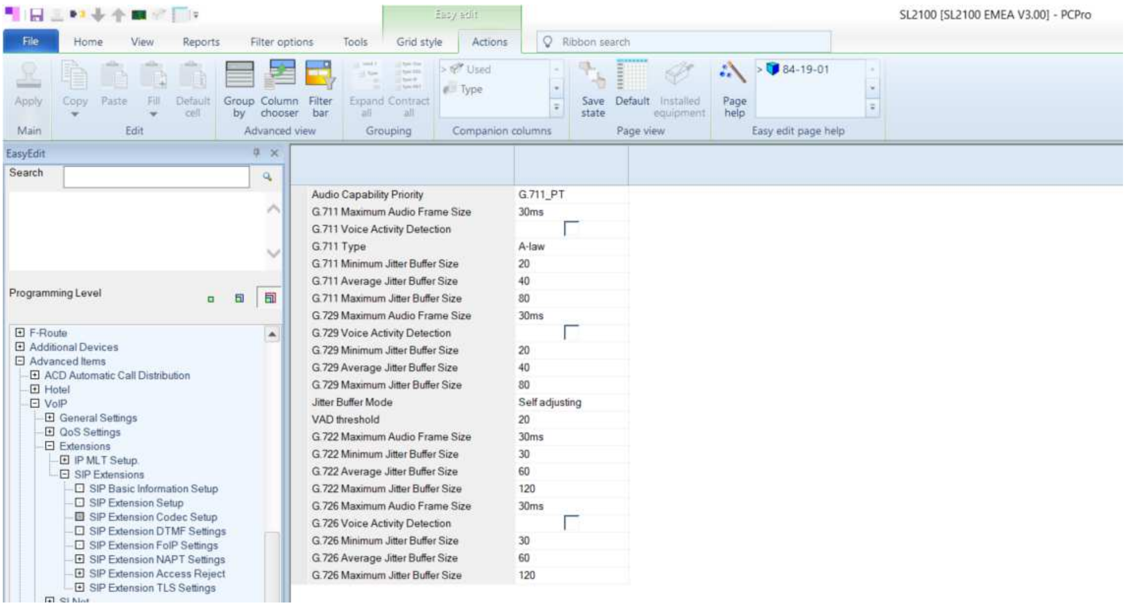


Advanced Edit	PRG	Item	Setting
Advanced Items + VoIP + Extensions + SIP Extensions + SIP Terminal Codec Settings	84-19-28	Audio Capability Priority	Enter the Codec priority as required. Default value is G.711PT. The 2N Verso supports G.711, G.729 & G.722.

SV9100

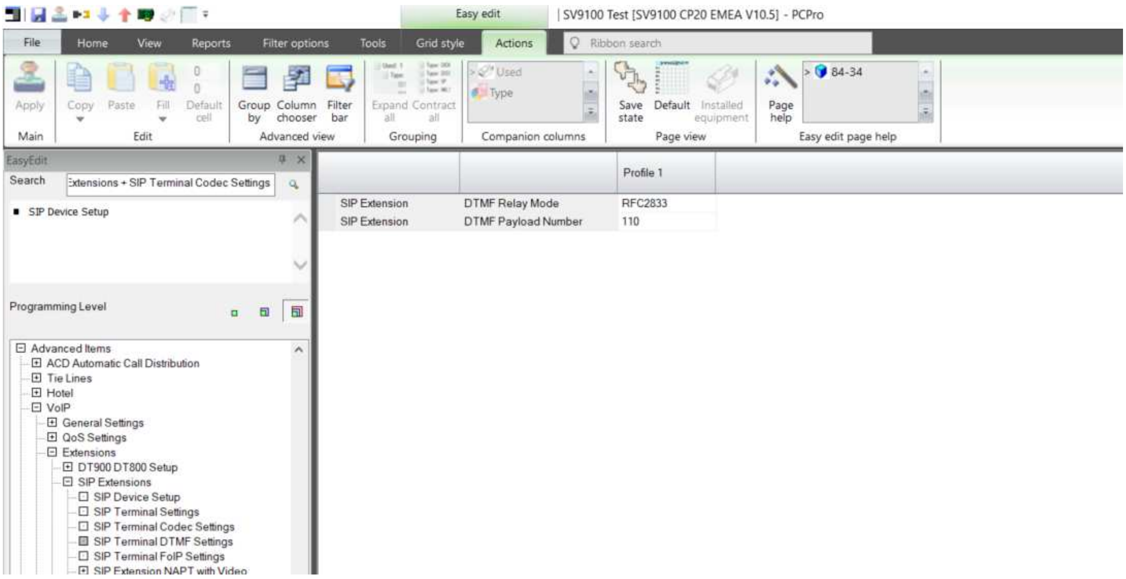


SL2100

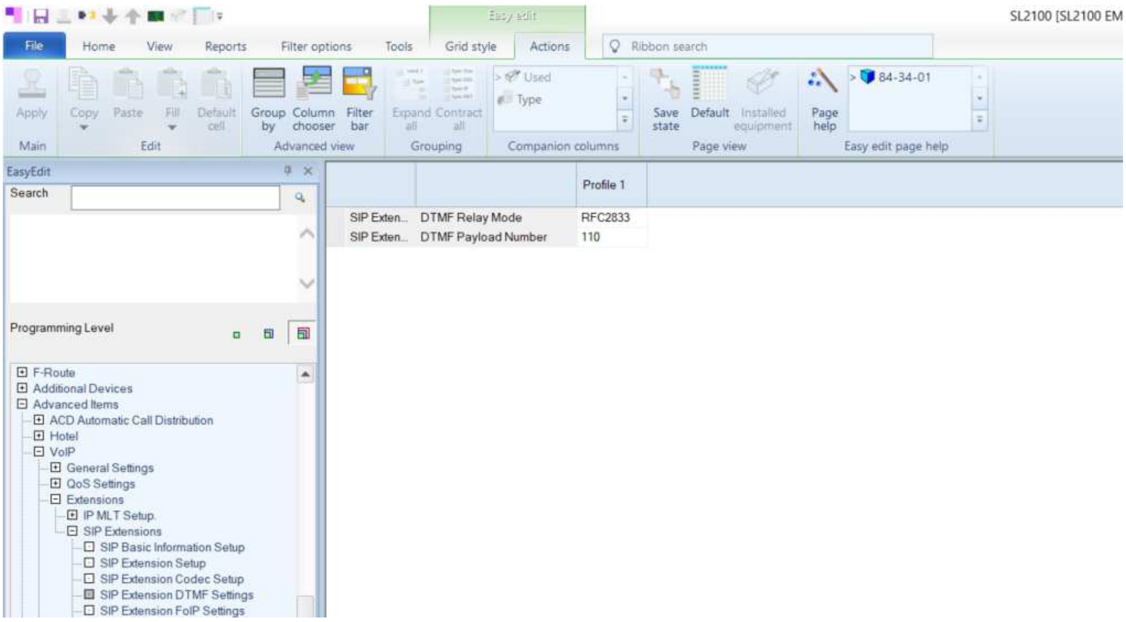


Advanced Edit	PRG	Item	Setting
Advanced Items + VoIP + Extensions + SIP Extensions + SIP Terminal DTMF Settings	84-34-01	DTMF Relay Mode	Set to RFC2833
	84-34-02	DTMF Payload Number	Set Payload to 110

SV9100



SL2100



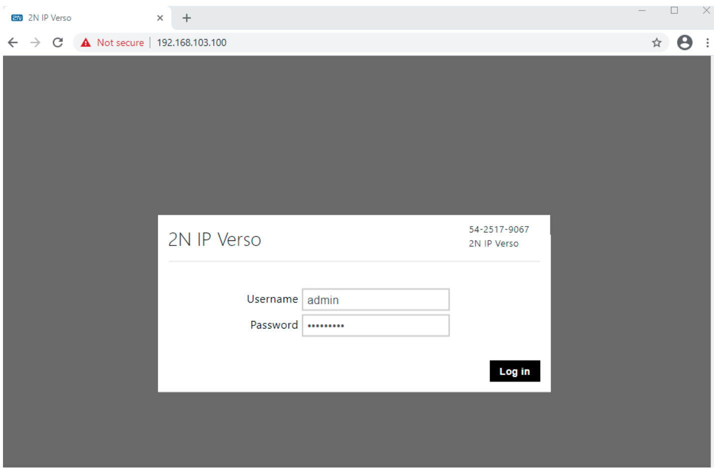
2N Verso SIP Video Door Phone configuration for connection to SV9100/SL2100 Platforms

LAN Connection and Logon Information

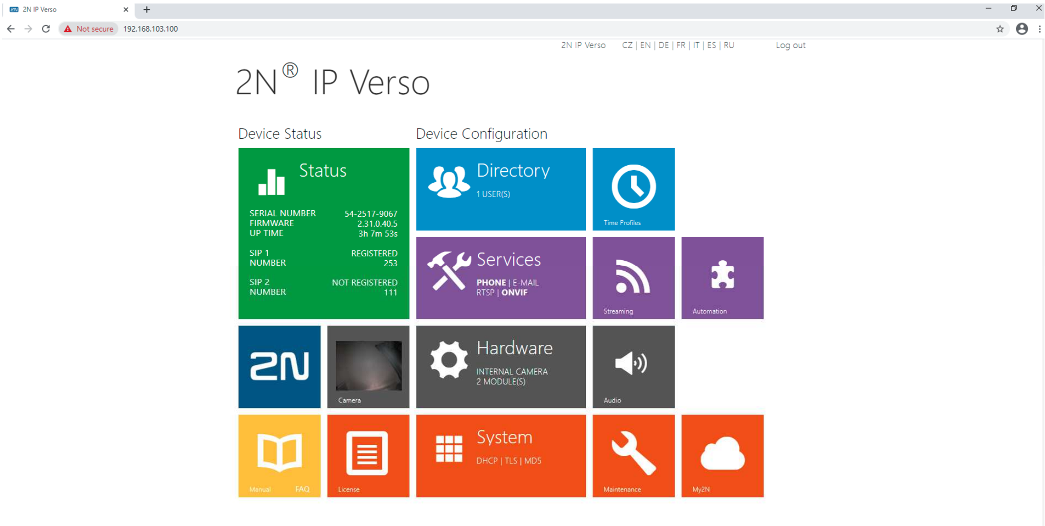
LAN Connection Setting You have to know the intercom configuration interface address to connect to the LAN successfully. Automatic IP address retrieval from the DHCP server is set by default in the 2N IP intercoms. Thus, if connected to a network in which a DHCP server configured to assign IP addresses to all new devices is available, the intercom will obtain an IP address from the DHCP server. The intercom IP address can be found in the DHCP server status (according to the MAC address given on the production plate), or will be communicated to you by the intercom voice function; refer to the Installation Manual of your intercom model. If there is no DHCP server in your LAN, use the intercom buttons to set the static IP address mode, refer to the Installation Manual of your intercom model. Your intercom address will then be **192.168.1.100**. Use it for the first login and then change it if necessary.

Now enter the intercom IP address into your favourite browser. We recommend you to use the latest Chrome, Firefox or Internet Explorer 9+ versions 2N IP intercom is not fully compatible with earlier browser versions.

Default User name is admin and password 2n (i.e. default reset password) for your first login to the configuration interface. The intercom requires a password change upon the first login. Strong passwords are only accepted - eight characters at least including one capital letter, one small letter and one digit.

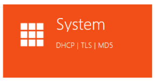


Once you have logged in successfully, you should now be at the Home Screen



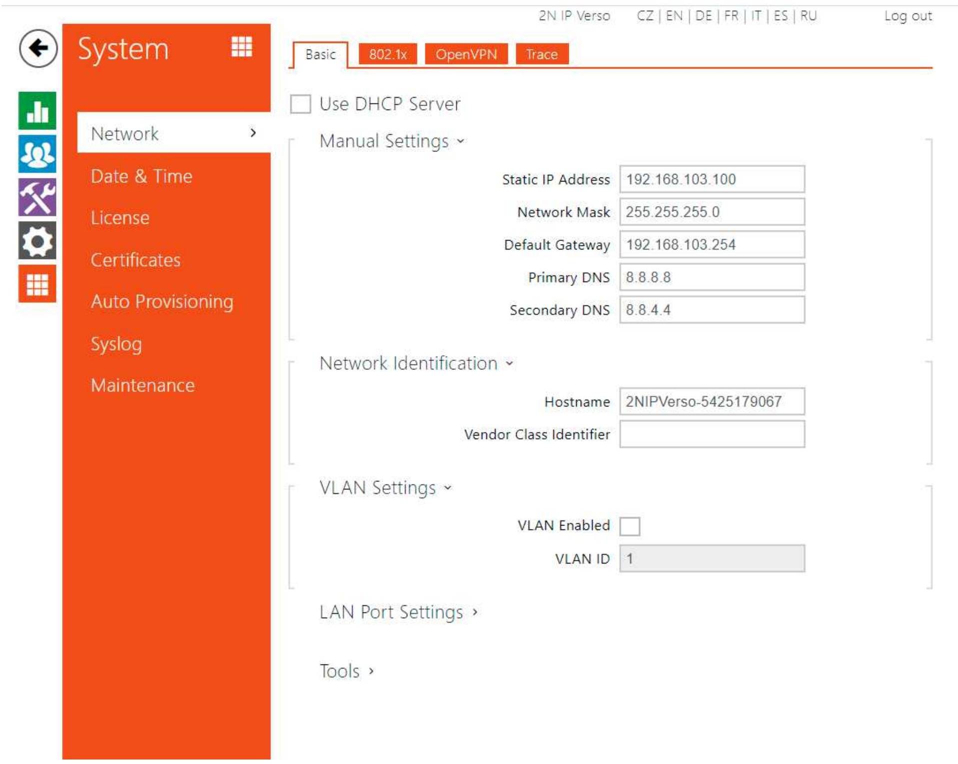
From the Home Page you need to configure as follows for the 2N Verso SIP Video Door phone to register to the SV9100/SL2100 Platforms.

To Set the Network settings for the device you need to click on the System button from the Home Screen.

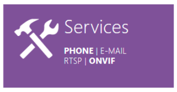


Enter the new IP Address, Network Address and Default Gateway for the new device that must be in the range of the SV9100/SL2100 PBX.

Disable DHCP if not required. Then Click Save to confirm changes.



Click on the Services button from the Home Screen to enter the credentials to register to the SV9100/SL2100 Platform.



For SIP 1 enter the extension log in details required.

Intercom Identity:

- Display Name
- Phone Number (ID) – This is the extension number assigned
- Domain – This is the registration IP Address of the SV9100/SL2100 (10-12-09)

Authentication:

- Use Authentication – Set to enable (10-33-02)
- Authentication ID – Enter the extension number assigned
- Password – Enter the 8 digit password as set in 15-05-16

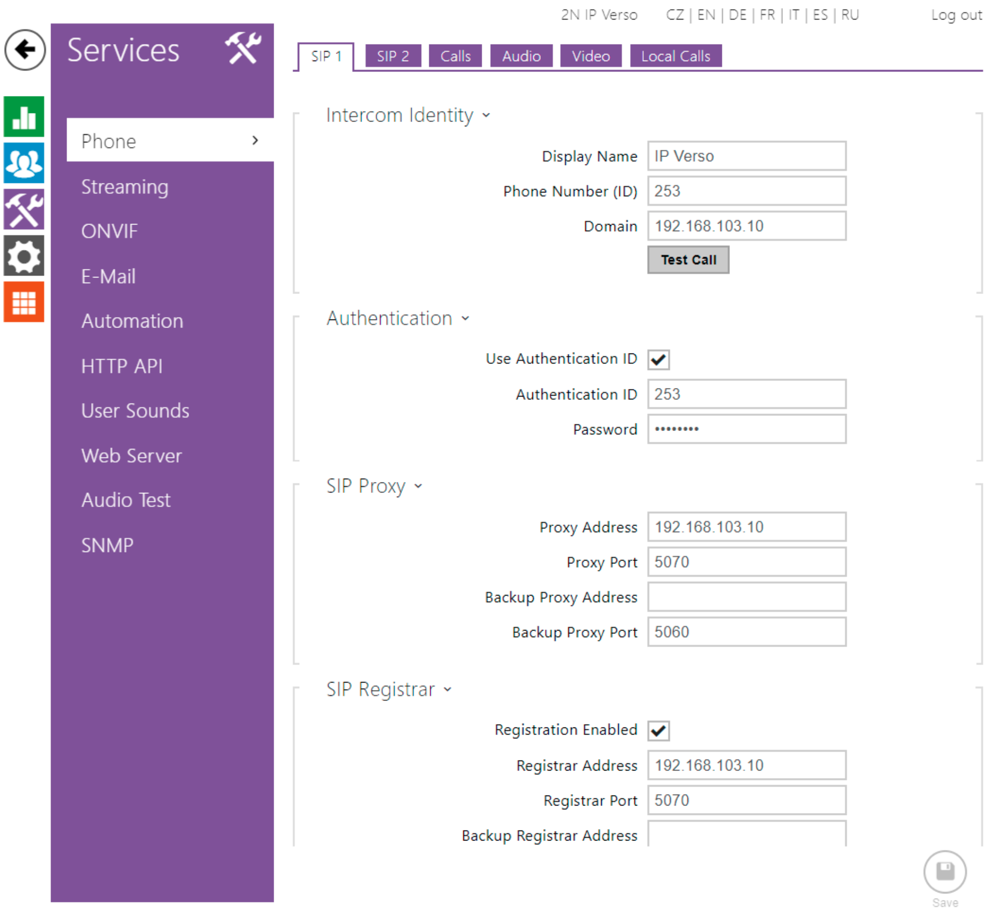
SIP Proxy:

- Proxy Address - IP Address of the SV9100/SL2100 (10-12-09)
- Proxy Port – Enter as 5070 (84-20-01)

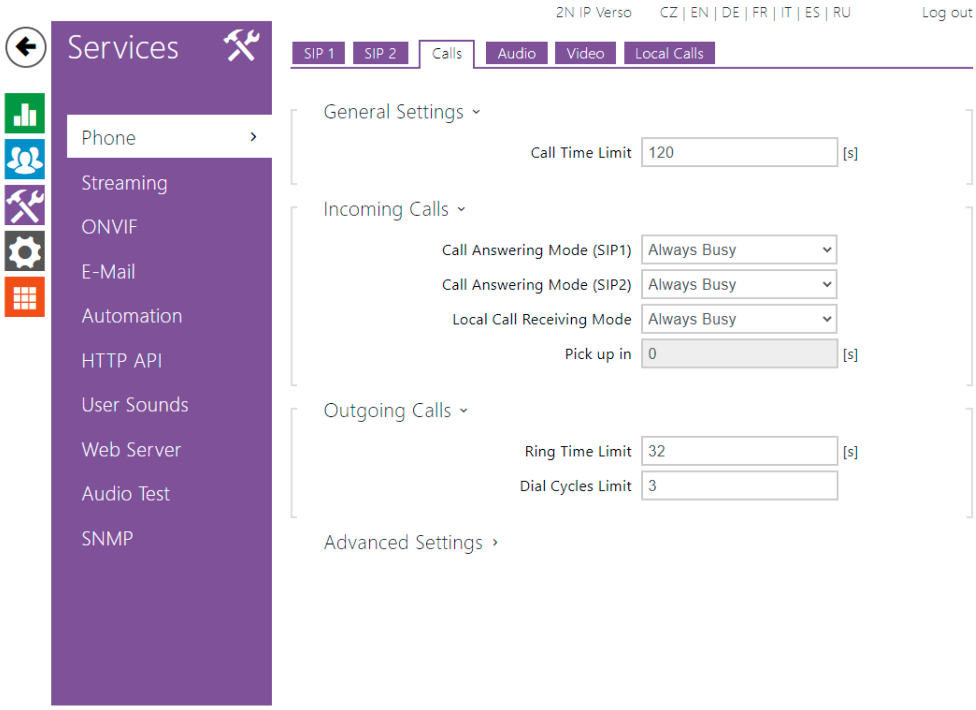
SIP Registrar:

- Registration Enabled – Tick
- Registration Address - IP Address of the SV9100/SL2100 (10-12-09)
- Registration Port - Enter as 5070 (84-20-01)

Click **Save** when finished.

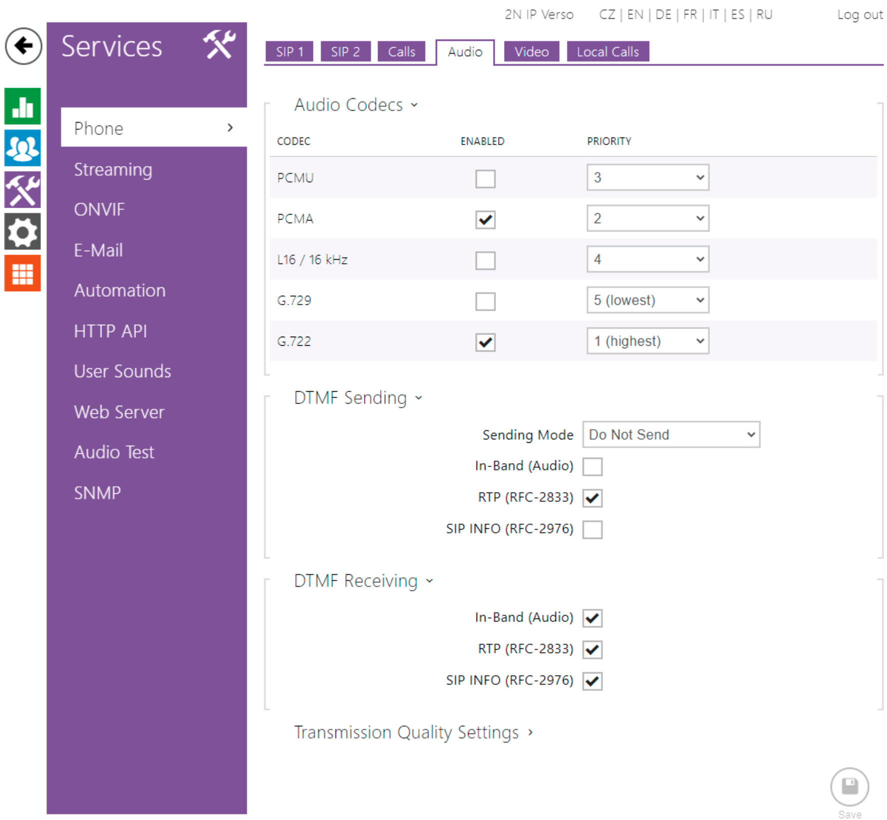


In the Call page set the Maximum Call Time Limit required. Default value is 120s.



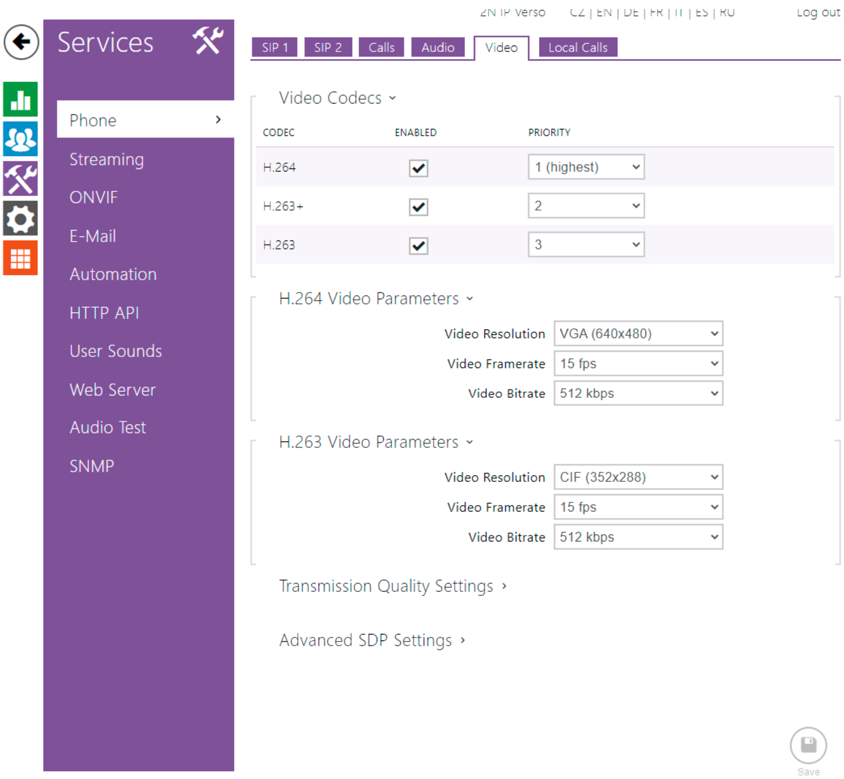
In the Audio Page you need to set the supported Codec priorities. Tests performed using G.722 as priority 1 and PCMA (G.711) as Priority 2.

G.722 is the default Codec used with the GT890 while G.711 will be negotiated by the SV9100/SL2100 by default for calls to other devices.

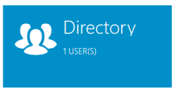


In the Video Page you will find the Video Codecs supported.

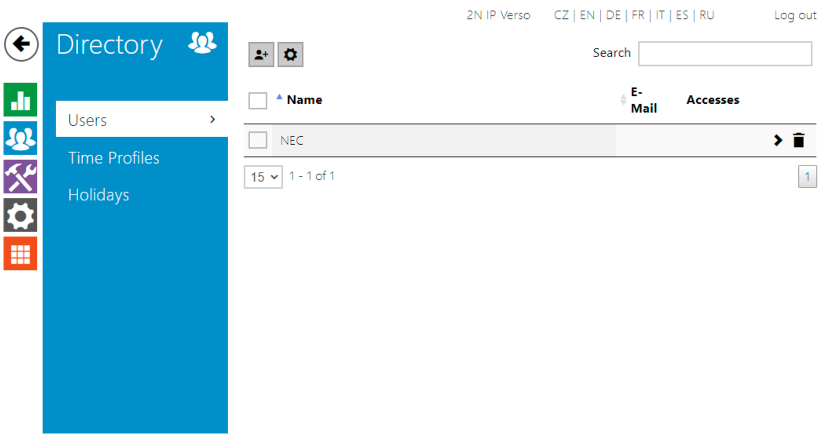
Video is only supported with calls to the GT890 Terminal using the ST500 Application. Supported video Codec is H.264 (Default Setting).



Return the **Home Screen** after saving settings and select the **Directory Button**



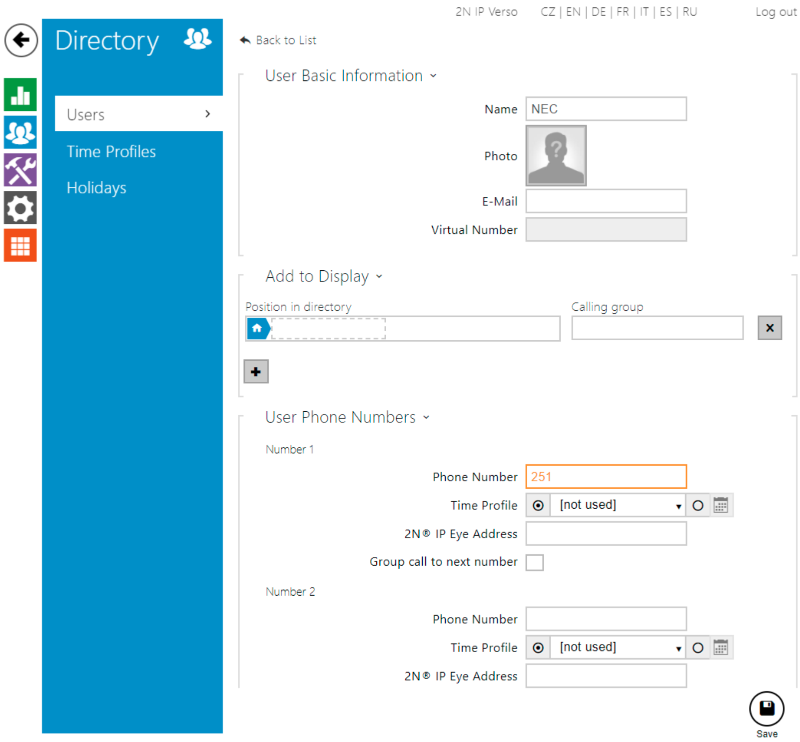
Within **Users** you need to create a New User, give this user a name. For this example the User is called NEC.



Click on the new user NEC and then you will be in the programming area below.

In User Basic Information, enter the name that appears on the 2N Device when the Door Entry Button is activated. This is also used in the Directory if multiple entry Buttons supplied.

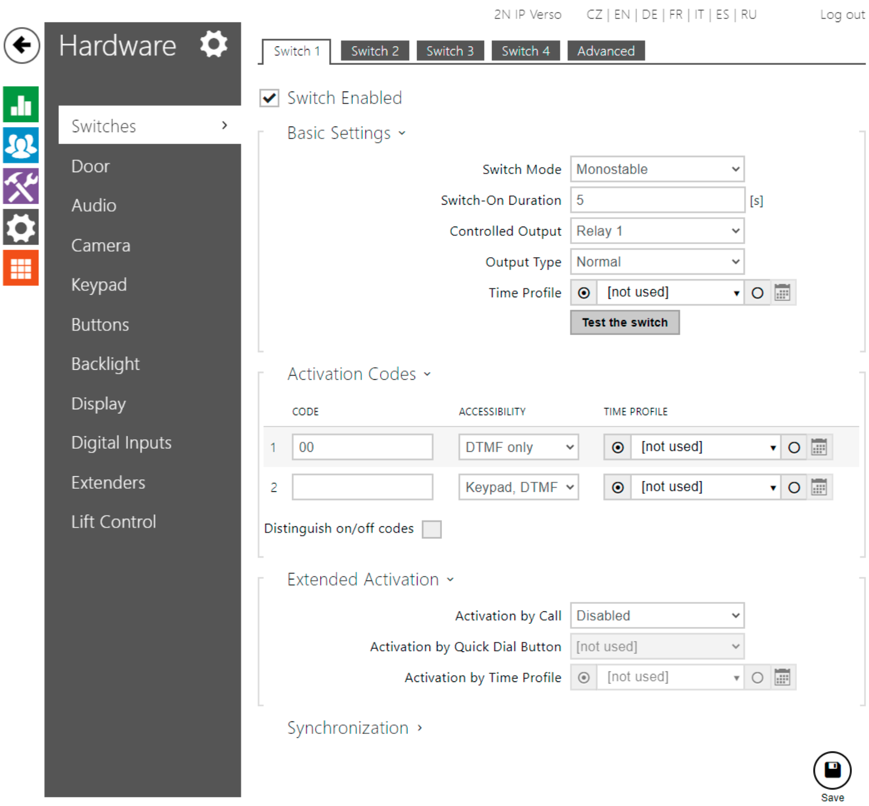
In User Phone Numbers, enter the destination number to be called when the Door Entry Button is pressed. This can be any internal Directory number that can be dialled on the SV9100/SL2100 as an Extension, Virtual Extension.



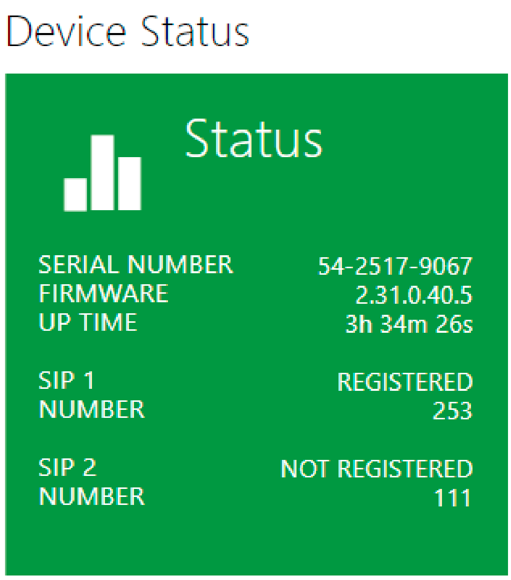
Click Save when ready and return to the Home Page

Finally we need to select the **Hardware Button** from the Home Screen

In the **Switches area**, Tick Switch Enabled and then enter the Activation Code required to open the door. Set Accessibility to DTMF Only. The Code set in this example is 00 so to open the Relay the extension that answered the call would enter 00*



Click Save and return back to the Home Page. Then check if the device is registered as per the example for SIP 1 Number below. If it is then you are ready to make a test call.



Known Limitations/Comments

- Video mode is only supported with peer-to-peer enabled.
- Video support with GT890 ST500 Application Only.
- Device is not capable of receiving incoming calls.
- Configuration notes provided are to set up a single 2N Verso SIP Door Entry Unit to the SV9100/SL2100 Platforms only.
- For further configuration information on the 2N Verso SIP Door Entry Unit then please view the installation Guide.

Compatibility Overview

	Compatible/Incompatible
Registration - No Authentication	
Successful Registration	Compatible
Maintain Registration	Compatible
Registration Refresh	Compatible
Registration Failure	Compatible
De-registration	Not Applicable
Registration with Authentication	
Successful Registration	Compatible
Maintain Registration	Compatible
Registration Refresh	Compatible
Registration Failure	Compatible
De-registration	Compatible
Registration Failure 480	Compatible
Call to PSTN/ISDN	
Call Setup	Not Applicable
Call Continuance	Not Applicable
Disconnect by Calling Party	Not Applicable
Disconnect by Called Party	Not Applicable
Call Cancel	Not Applicable
Call internal to Key telephone TDM/ GT890 / DT900	
Call Setup	Compatible
Call Continuance	120 seconds
Disconnect by Calling Party	Compatible
Disconnect by Called Party	Compatible
Call Cancel	Compatible
Incoming call from PSTN/ISDN	
Call Setup	Not Applicable
Call Continuance	Not Applicable
Disconnect by Calling Party	Not Applicable
Disconnect by Called Party	Not Applicable
Call Cancel	Not Applicable
Incoming call from Key telephone	
Call Setup	Not Compatible
Call Continuance	Not Compatible
Disconnect by Calling Party	Not Compatible
Disconnect by Called Party	Not Compatible
Call Cancel	Not Compatible
CODECs Disabling and Reordering	
Disabled CODEC outgoing call	Not Compatible
Disabled CODEC incoming call	Not Compatible
CODEC order outgoing call	Compatible
CODEC order incoming call	Compatible
Sending digits during ringing	
Sending digits during ringing	Not Applicable
Sending digits during conversation	

Sending digits during conversation	Compatible
Sending digits during ringing (DTMF Relay)	
Sending digits during ringing	Not Applicable
Sending digits during conversation (DTMF Relay)	
Sending digits during conversation	Not Applicable
Flash hook/recall	
Hold & retrieve	Not Applicable
Consult Transfer (Flash hook/recall)	
Hold & Transfer (REFER)	Not Applicable
Blind Transfer (Flash hook/recall)	
Hold & Blind Transfer (REFER)	Not Applicable
Call to PSTN/ISDN Peer to Peer enabled	
Call Setup	Not Applicable
Call Continuance	Not Applicable
Disconnect by Calling Party	Not Applicable
Disconnect by Called Party	Not Applicable
Call Cancel	Not Applicable
Call internal to Key telephone Peer to Peer enabled (GT890)	
Call Setup	Compatible
Call Continuance	Compatible
Disconnect by Calling Party	Compatible
Disconnect by Called Party	Compatible
Call Cancel	Compatible
Sending digits during ringing Peer to Peer enabled	
Sending digits during ringing	Not Applicable
Sending digits during conversation Peer to Peer enabled	
Sending digits during conversation	Compatible
Sending digits during ringing Peer to Peer enabled (DTMF Relay)	
Sending digits during ringing	Not Compatible
Sending digits during conversation Peer to Peer enabled (DTMF Relay)	
Sending digits during conversation	Compatible
Flash hook/recall Peer to Peer enabled	
Hold & retrieve	Not Compatible
Consult Transfer (Flash hook/recall) Peer to Peer enabled	
Hold & Transfer (REFER)	Not Compatible
Blind Transfer (Flash hook/recall) Peer to Peer enabled	
Hold & Blind Transfer (REFER)	Not Compatible
Power out/kill process	
Unexpected SIP extension termination (Idle)	Compatible
Unexpected SIP extension termination (In conversation)	Compatible
Network Issues	
Disconnect the Ethernet cable X3 (During idle)	Compatible
Disconnect the Ethernet cable X3 (During conversation)	Compatible
Disconnect the Ethernet cable X4 (During idle)	Compatible
Disconnect the Ethernet cable X4 (During conversation)	Compatible
Disconnect the Ethernet cable X2 (RTP stream) (During conversation)	Compatible

Audio CODEC Overview – See section 7 for detailed test results of CODEC compatibility.	
G.711	Compatible
G.729	Compatible
G.722	Compatible
G.726	Incompatible

Video Overview – Supported using GT890 Terminal with ST500 Application	
H.264	Compatible
H.263	Incompatible
H.262	Incompatible

Further Support

Actual product support must be obtained from the supplier or manufacturer of the third party device.

Document History

Version	Date	Description
1.0	02/03/2021	Initial Release