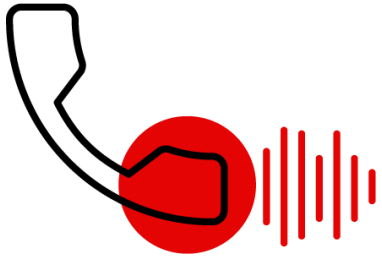
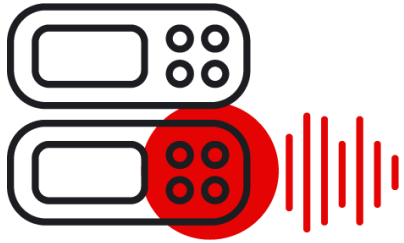
Audio
Video
Technologies





MAGIC THipPro

Configuration Guide

Version: 3.712 (05. July 2022)

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Additional Documents

- Get further information in the following documents which are available in the Download section of our website at www.avt-nbg.de.
- Quick Guides:
  - Audio over IP (AES67-DANTE-RAVENNA-LIVEWIRE)
  - Signalling and Control with DHD SetLogic
  - Signalling and Control with Ember+
  - Ember+ Consumer Extension
  - MAGIC PhonerSet Provisioning Guide
  - SQL Server 2012 Installation
- Documentations:
  - MAGIC PhonerSet
  - MAGIC THipPro Hardware

MAGIC THipPro

Overview

- Hardware
- Line Protocols
- Basic Features
- Optional Features
- Accessories

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Hardware - Front

- Five Status LEDs
  - POWER
  - SYNC (On while booting)
  - ALARM (Indicating hardware problems)
  - INFO 1, INFO 2 (Not in use)

- Two RJ10 Handset/Headset interfaces for PRETALK.
- Illuminated graphic display with 160 x 32 pixels & front keypad.
  - For basic settings and status display only.

Hardware – Rear

- Two independent LAN interfaces to separate control and VoIP
  - Up to three VLANs per LAN interface
- Word clock input/output
- 2 x analogue mono audio in-/outputs
  - 2 x XLR male/female each
- 4 x AES3/EBU stereo audio in-/outputs
  - 8 digital audio lines (2 x Sub-D 15-pole with adaptors to XLR male/female)
- Programmable GPIO interface
  - 8 TTL in-/output
  - 8 relays (8 x NOC)
- 2 x slots for extension modules

Hardware – Module slots 1 and 2 (1)

- ISDN
  - 1 x ISDN module for 8 caller lines
    or
    2 x ISDN modules for 16 caller lines
- POTS
  - 2 x POTS modules for 8 caller lines
  - Notice: A 16 channel POTS system is not available

- LAN 3/4 Module
  - Two additional 10/100 Mbit/s Ethernet interfaces

Hardware – Module slots 1 and 2 (2)

- DANTE
  - 32 channels in/out
  - 2 Ethernet interfaces
  - Only for VoIP systems
  - The standard Audio interfaces can still be used

- RAVENNA
  - 32 channels in/out
  - 2 Ethernet interfaces
  - Only for VoIP systems
  - The standard Audio interfaces can still be used

Line Protocols

ISDN
- Euro ISDN
  - Supporting Multiple Subscriber Numbers (MSN)
- US ISDN (NI-1)
  - Supporting Service Provider Identifications (SPID)
  - Supporting Directory Numbers (DN)
- Japanese ISDN
  - Supporting Multiple Subscriber Numbers (MSN)

POTS
- Supporting worldwide country types, configurable via software (regarding impedances, levels and ringing signals).
- Separate country type settings for Main Exchange or PBX lines
- Busy tone measurement for automatic hang-up
- Caller ID (via DTMF, FSK SDMF, FSK MDMF)

VoIP
- SIP - Session Initiation Protocol RFC 3261
- Support of STUN (Session Traversal Utilities for NAT) for systems behind firewalls
- Configurable SIP server per line

Line Interface Upgrades

- MAGIC THipPro 8 VoIP
  - 16 x VoIP (Hardware Upgrade)
- MAGIC THipPro 8 POTS
  - 8 x VoIP (Software Upgrade only)
  - 16 x VoIP (Hardware Upgrade)
  - 16 x POTS is not available
- MAGIC THipPro 8 ISDN
  - 8 x VoIP (Software Upgrade only)
  - 16 x VoIP (Hardware Upgrade)
  - 16 x ISDN (Hardware Upgrade)
- MAGIC THipPro 16 VoIP
  - currently no upgrade available
- MAGIC THipPro 16 ISDN
  - 16 x VoIP (Software Upgrade only)
- VoIP / ISDN Mixed Mode
  - It is possible to specify for each line whether it should be used for VoIP or ISDN.
  - The precondition is that the same number of lines is licensed for both operating modes.
  - Licensed VoIP and ISDN lines don’t add up.

Mixed Mode of the Line Interfaces

- The system allows for a simultaneous operation of
  - ISDN and VoIP lines
    or
  - POTS and VoIP lines
- It can be configured freely which line is to be routed via ISDN/POTS or IP
  - 8-channels ISDN/POTS System + VoIP8 Upgrade
    - → In total 8 lines can be used in the Mixed Mode
  - 8-channels ISDN System + VoIP16 Upgrade
    - → In total 8 lines can be used in the Mixed Mode
  - 8-channels POTS System + VoIP16 Upgrade
    - → In total 16 lines can be used in the Mixed Mode
  - 16-channels ISDN System + VoIP8 Upgrade
    - → In total 8 lines can be used in the Mixed Mode
  - 16-channels ISDN System + VoIP16/32 Upgrade
    - → In total 16 lines can be used in the Mixed Mode

Basic Features (1)

- Housing 19” x 1 U
  - Leave 1U space above the unit for cooling.
- No fan for noiseless operation
- Low power consumption of typically 15W
- Two basic system variants
  - 8 caller lines, upgradeable to 16 caller lines
  - 16 caller lines
- 12 Audio lines
  - 2 x analogue in-/outputs
  - 8 x digital in-/outputs (4 x AES)
  - 2 x handsets/headsets

- Digital signal processing for each channel
  - Echo Canceller with up to 120 ms echo tail time
  - AGC Automatic Gain Control
  - Expander for noise reduction
  - Voice Disguise (VD) function
- Multiple simultaneous conferencing possibilities for PRETALK and ON AIR

Basic Features (2)

- Up to 4 internal recorded or external files as HOLD signals with up to 16 seconds
- Use up to 6 audio channels as external HOLD inputs
- Programmable GPIOs for controlling a mixing console and for external signalling
- DHD SetLogic Support
  - 96 GPIOs, each configurable as input or output
  - Predefined GPIOs for a dialling keypad
- Ember+ Provider Support
  - Connect up to 8 Ember+ Consumers
  - 96 GPIO inputs
  - 96 GPIO outputs
  - Predefined GPIOs for one dialling keypad
  - Caller number, caller name, Functions
- Ember+ Consumer Support
  - Connect to up to two Ember+ Providers
  - 20 slots per Ember+ Consumer
  - For screening information, Numbers to dial, …
- DTMF generator for transmission of DTMF tones
- Integrated SIP Monitor and Logging
- Audio test panel with signal generator

Optional Features (1)

- MAGIC THipPro LAN Software
  - Touch optimized Windows PC software for call control
  - Single user licence
  - Up to 20 clients (LAN Client and Screener combined) per unit
- MAGIC THipPro Screener Software
  - Windows PC software optimised for data entry
  - Single user licence
  - Up to 20 clients (LAN Client and Screener combined) per unit
- News Desk Client Upgrade
  - Operate the LAN Client software in a slimmed down version.
  - No ON AIR and no configuration of the system possible
  - Single user licence
  - Up to 30 clients (combined with LAN Client and Screener) per unit
  - Operates on a separate pool of telephone lines which can be assigned individually to each News Desk client
- MAGIC System Manager
  - Access the MAGIC THipPro from AVT's central management software which supports all AVT telephone hybrids and audio codecs.
  - Comfortable overview of system health, full configuration and Preset management.
  - Windows PC software
- PhonerSet
  - Control up to eight lines via a touchscreen-equipped Grandstream Android phone.
  - Use the phone's handset for Pretalk.
  - Connect up to six PhonerSets.
  - Single licence per PhonerSet.

Optional Features (2)

- THipPro Admin Upgrade
  - Allows for splitting the telephone lines between up to six studios.
  - Sharing lines between studios is possible.
  - Without this upgrade each Client PC will see the same caller lines.
  - Single licence per studio.
- VoIP Extension Upgrade
  - For 8 or 16 channels
- HD-Voice (G.722)
  - High quality speech codec in VoIP and ISDN operating mode
    - Doubling the audio bandwidth compared to the standard ISDN codec.
    - VoIP Extension Upgrade is required
  - Automatic selection of the best codec for VoIP calls.
- Collaboration Server für Microsoft Teams
  - Displayed as regular telephone lines.
  - Integrated with the phone book.
  - Call contacts within your organization and attend meetings.
  - HD-Voice audio quality
- Pretalk Streaming via IP
  - Stream pretalk audio signals between up to 10 PCs and the THipPro.
  - Use any audio interface of the PC (e.g. a USB headset)
  - Supports convenient recording at the PC.
  - Single licence per Pretalk Stream
- MAGIC THipPro ACconnect
  - Seamless integration of the MAGIC ACip3 Audio Codec.

Optional Features (3)

- LAN3/4 Module
  - Hardware upgrade adding 2 Ethernet interfaces.
  - Not available for POTS or ISDN hybrids.
  - Supports all protocols except AES67.
- AES67
  - Audio over IP networking software upgrade.
  - Output: 8 audio channels (1 stream).
  - Input: 8 audio channels (2 streams).
  - Announcement and auto discovery of streams.
  - SDP stream description import supported.
  - Limited to Ethernet interfaces 1 and 2.
- Dante Module
  - Audio over IP networking hardware upgrade.
  - 32x32 audio channels.
  - Supports AES67 for interconnection with Ravenna, Livewire+, etc.
  - 2 Ethernet interfaces to support redundancy
- Ravenna Module
  - Audio over IP networking hardware upgrade.
  - 32x32 audio channels.
  - Supports AES67 for interconnection with Dante, Livewire+, etc.
  - 2 Ethernet interfaces to support redundancy
- POTS Module
  - 2 modules with 4 channels each
  - 8 POTS channels per unit
- ISDN Module
  - 1 or 2 modules with 8 channels each
  - Up to 16 ISDN channels per unit

Optional Features (4)

- Ember+ Extension
  - Connect up to 10 third party workplaces using only Ember+ and DHD SetLogic.
  - Full call control and display of caller information and audio level.
  - Single licence per workplace.
- DTMF Analyser
  - Game Show and Event Mode
- Social Media Server
  - TWITTER integration into LAN client and Screener

- Competition Management
  - Manage competitions from the MAGIC Screener software
  - Price contingents and handed out prices are managed automatically.
  - Create result lists for accounting or attendee lists for events.
- Redundant Power Supply
  - Additional socket for an external power adapter.
  - Power adapter included.

Accessories

- MAGIC PhonerSet
- MAGIC THipPro Handset
- MAGIC THipPro Headset
- USB Headsets
  - For Pretalk Audio Streaming
- USB Handset

MAGIC THipPro

Software Clients

- MAGIC THipPro LAN
- MAGIC THipPro SCREENER
- MAGIC THipPro News Desk Client

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Software Clients

- MAGIC THipPro LAN
  - Touch optimised Windows PC software
  - Single-user licence
  - Supporting window sizes between 400x400px and 7680x4068px.
  - Automatic scaling for high-DPI screens.
  - Special variant: Newsdesk-Client
    - Restricted MAGIC THipPro LAN user interface
      - No ON AIR buttons
      - No system configuration
    - Incl. PRETALK Streaming Licence

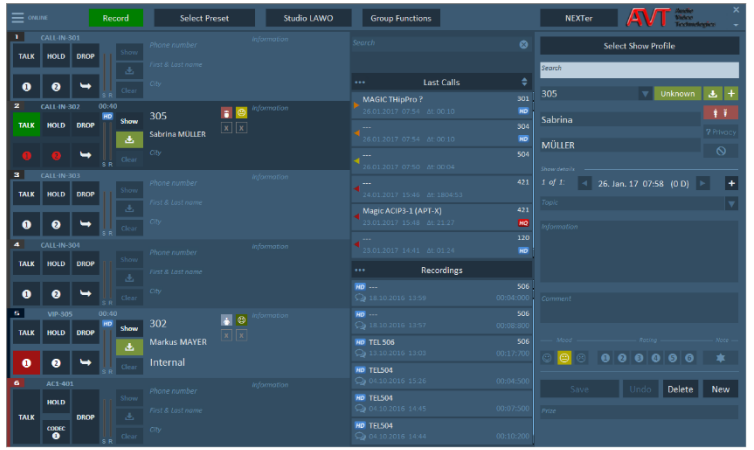
- MAGIC THipPro SCREENER
  - Single-user licence (Basic and Extension)
  - Automatic scaling for high-DPI screens.
  - Optional: Social Media Server (currently supported: Twitter)
- In total up to 20 LAN/Screener clients or up to 30 Newsdesk Clients can access the system simultaneously.
- MS SQL Server backend database
  - MS SQL Server 2012 (Express) or higher
- Each client has direct access to MAGIC THipPro system.

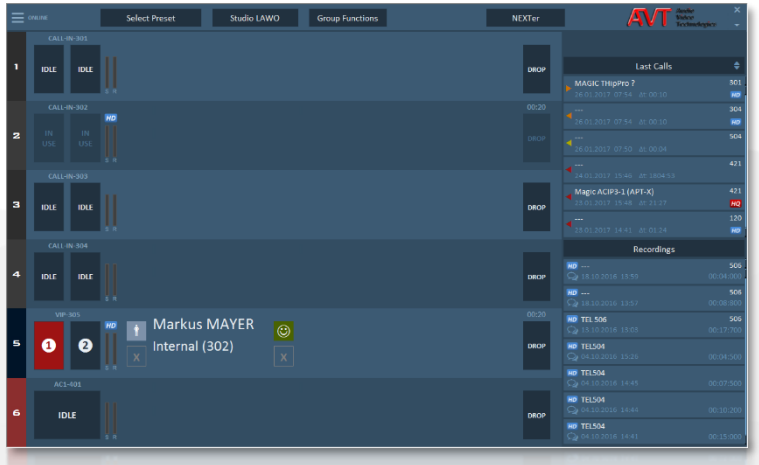
MAGIC THipPro LAN Client

- Supporting Windows 8.1/10 (32/64 Bit)
- 16:10/16:9 touch monitor is recommended
- All channels can be displayed on one screen
- Direct access in 2 Faders Mode with up to four ON AIR buttons per line
- Level Meter with level control and AGC
- Two Call Forwarding modes
  - Standard, occupying a reserved channel of the system
  - ECT – Explicit Call Transfer
- Free choice of background colours
- Program logo
- Slide-in sidebar for call history, recordings, chat and answering machine.

MAGIC THipPro SCREENER Client

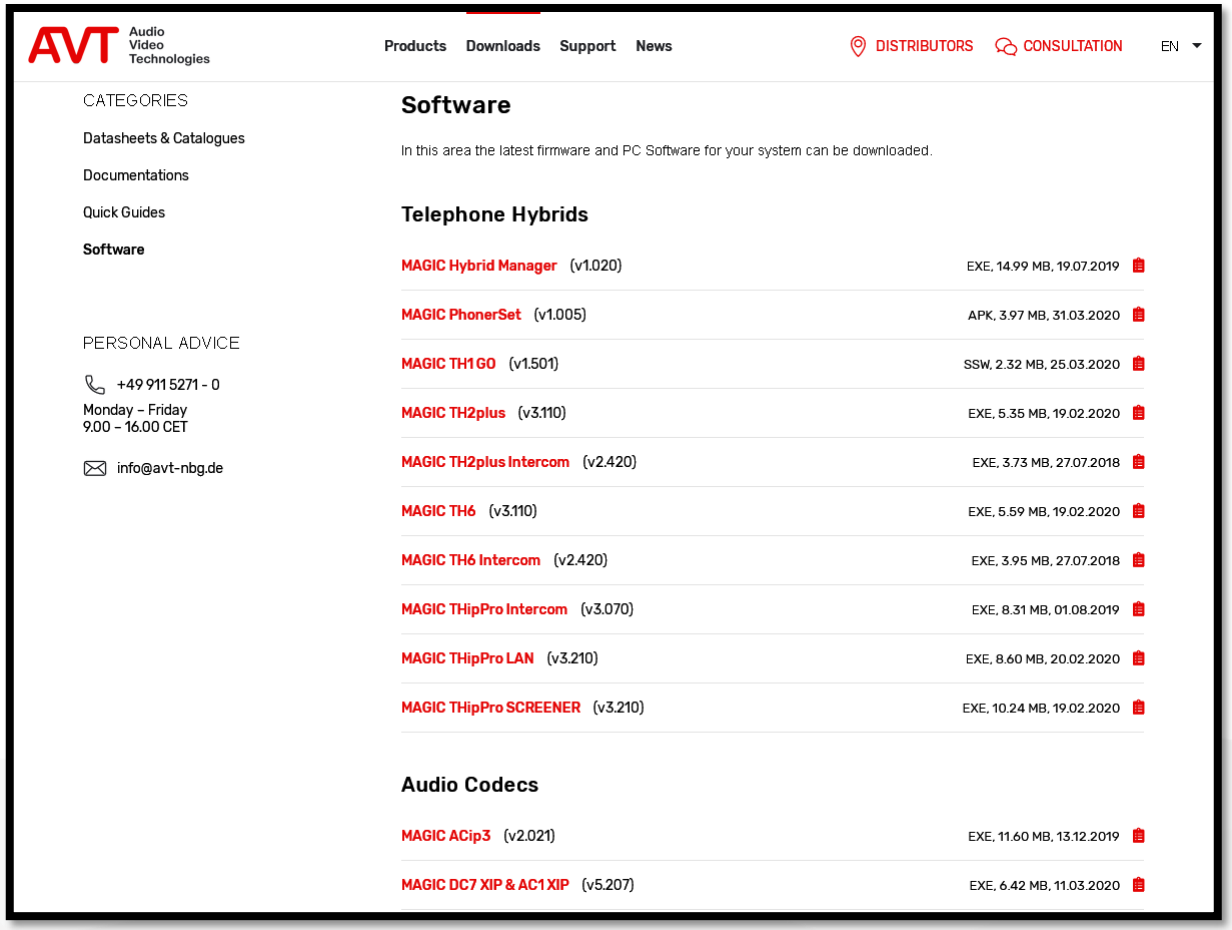
- Supporting Windows 8.1/10 (32/64 Bit)
- 16:10/16:9 touch monitor is recommended
- Different operation modes
  - Screener, Presenter, (Presenter ON AIR), Data Editing only, Call Out
- Level Meter
- Full control of the hybrid system
- MS ACCESS 2010 based Front End
- Colours of the design can be adjusted
- Program logo





Resources

- AVT MAGIC THipPro devices come with a USB Flash Drive which contains:
  - MAGIC THipPro LAN PC software
  - MAGIC THipPro Screener PC software
  - Microsoft SQL Server 2012 Express
  - Microsoft SQL Tools
- The latest versions of MAGIC THipPro LAN and MAGIC THipPro Screener are freely available in the download section of our website http://www.avt-nbg.de.
- Also check the DOCUMENTS and QUICK GUIDES sections for further information.



MAGIC THipPro

Typical applications

- Basic application with MAGIC THipPro
- Application with two studios
- Application with ADMIN Upgrade
- Application with redundancy

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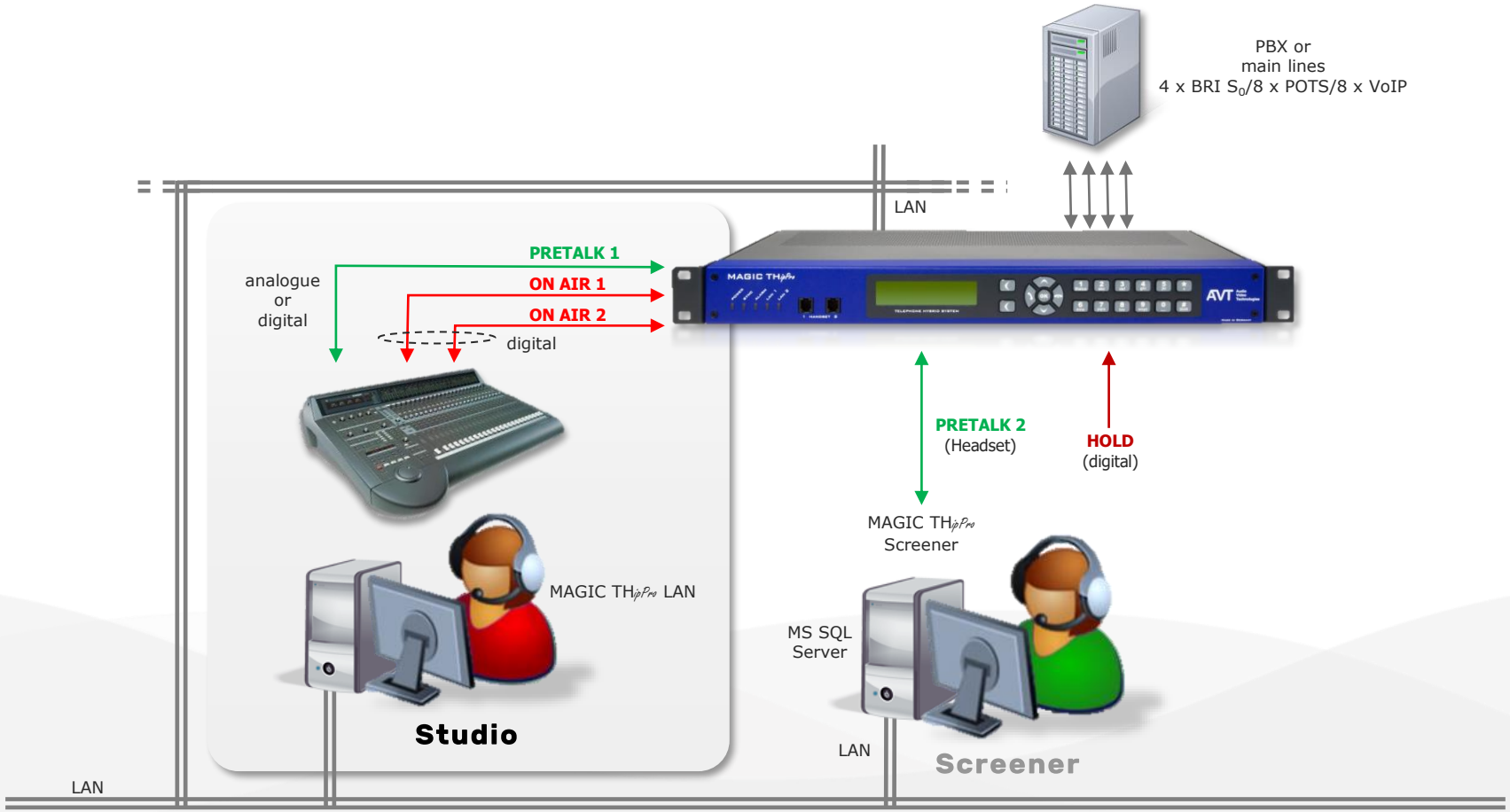
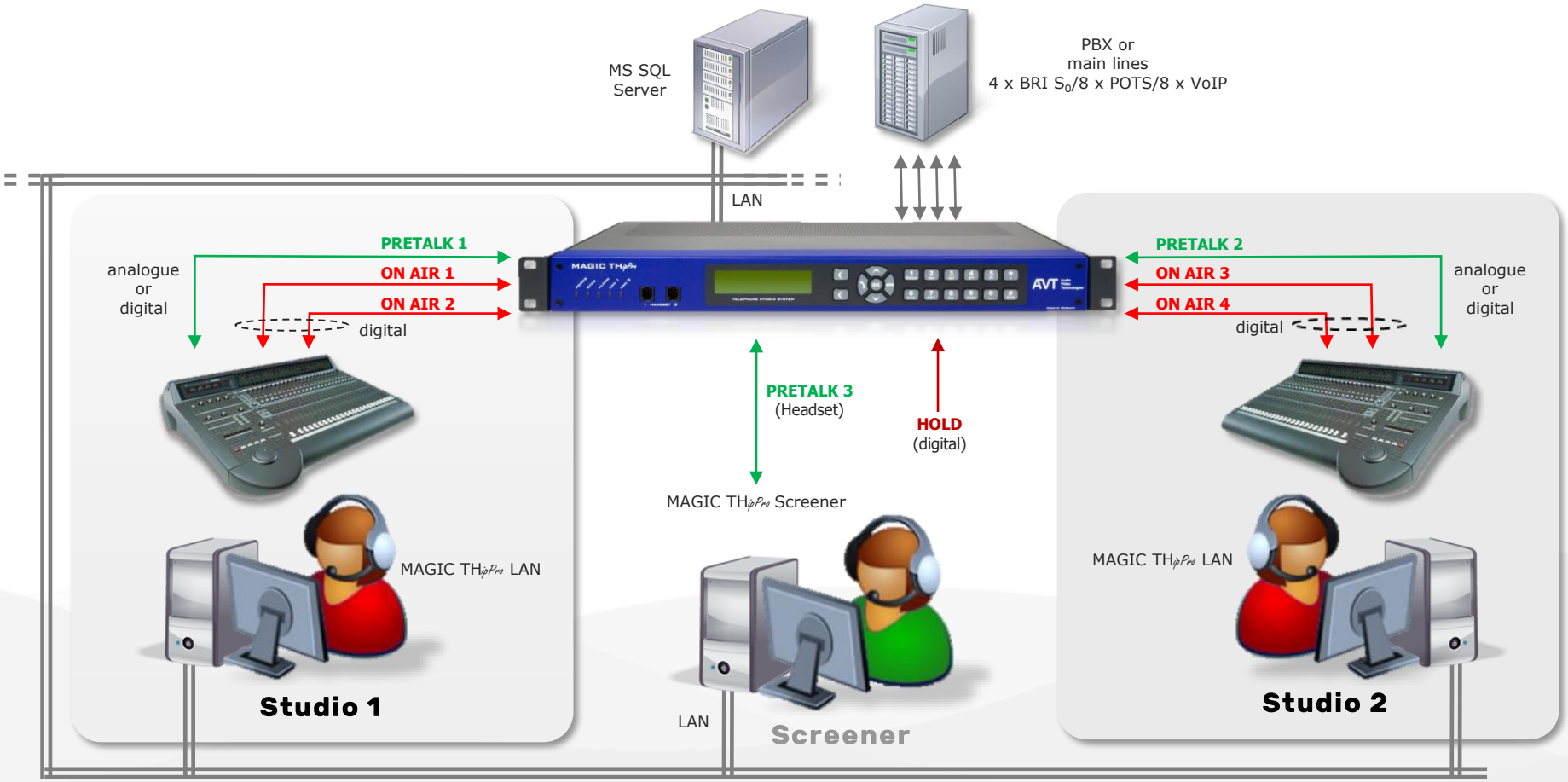
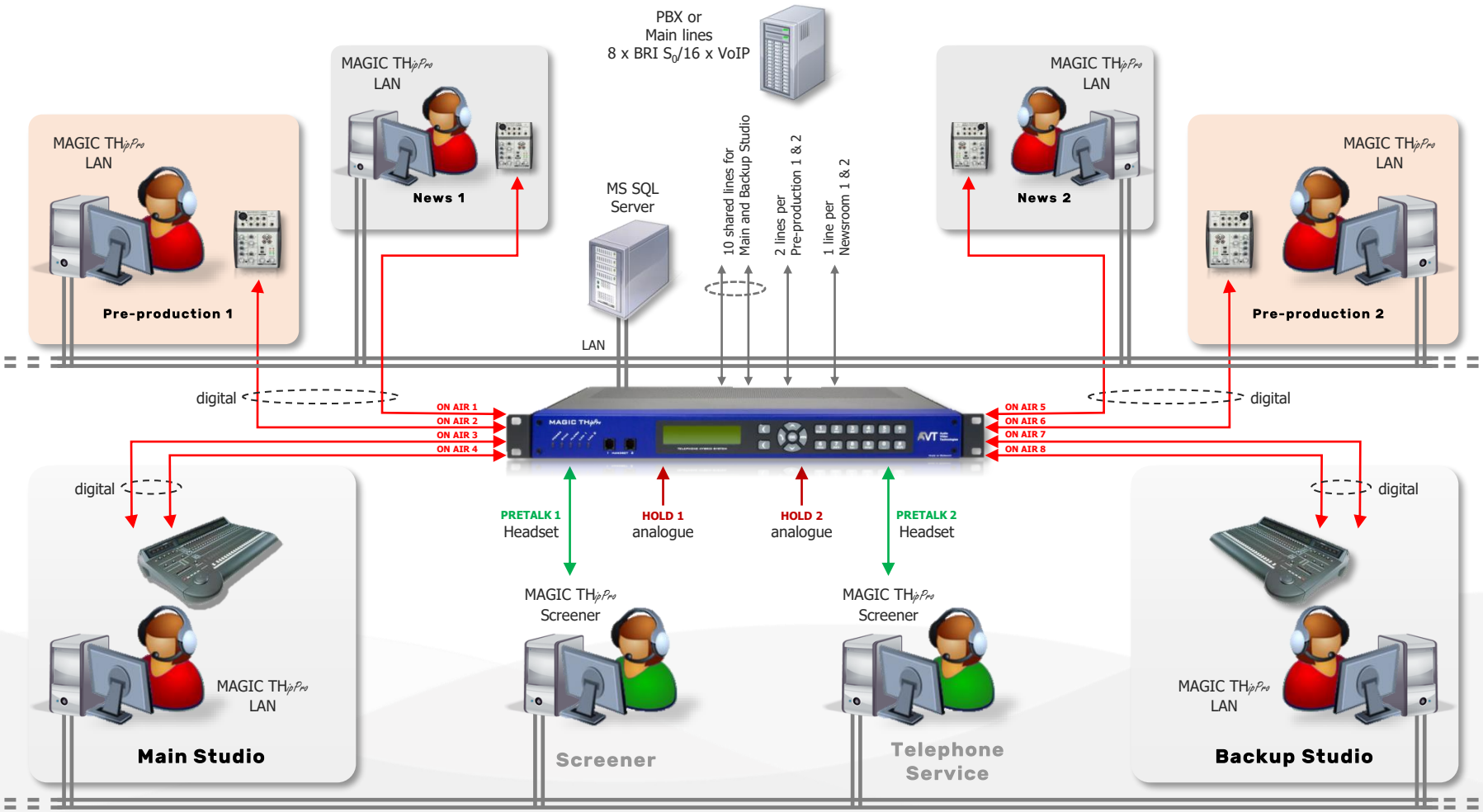
Basic application with MAGIC THipPro



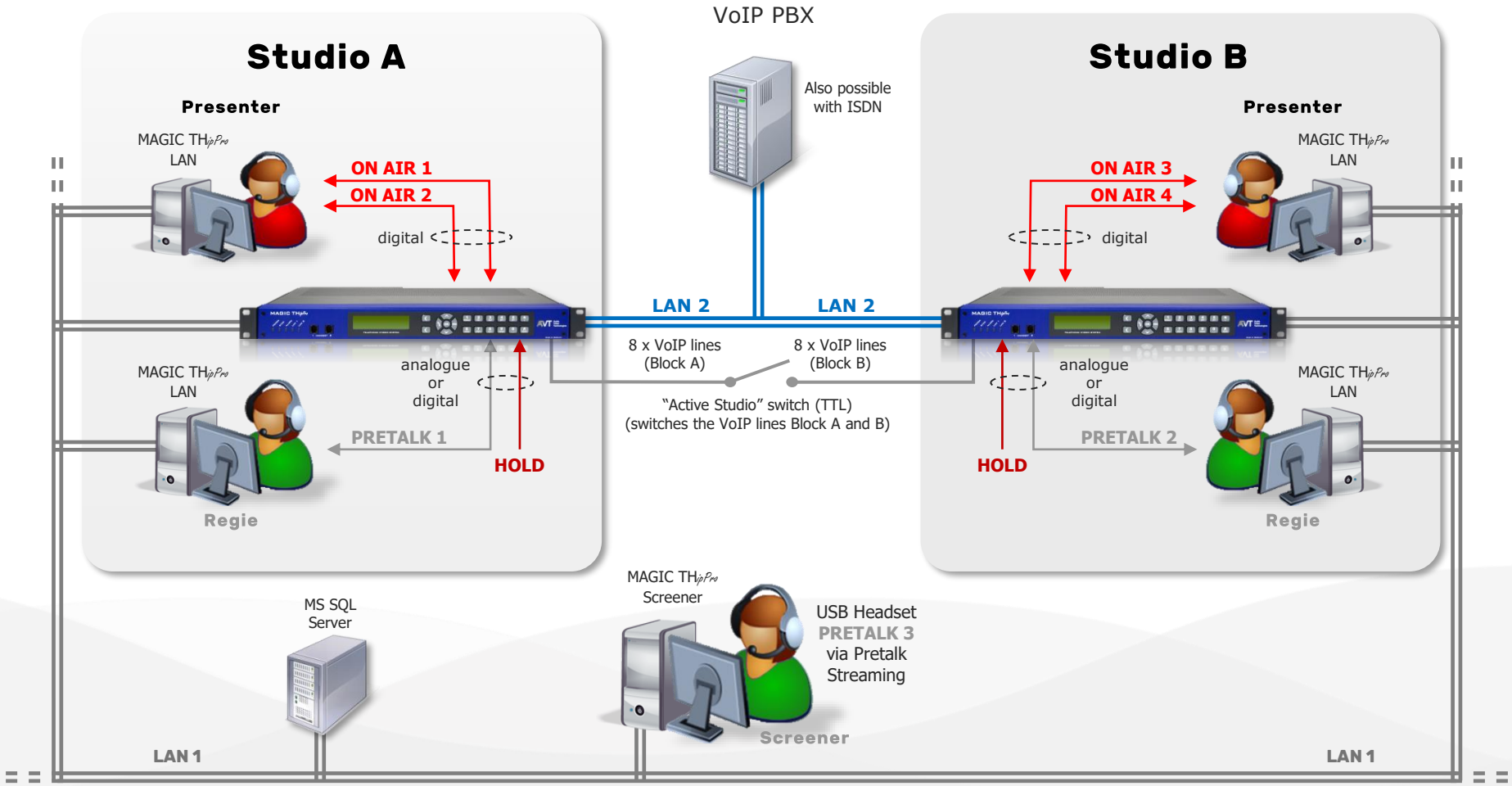
Application with two studios



Application with ADMIN Upgrade



Application with redundancy



MAGIC THipPro

Quality of Service & VoIP

- VLAN
- DiffServ / DSCP
- Tipps & Tricks

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Prioritising VoIP packets

- There are three ways of prioritising the “VIPs“ = “Very important packets“:
- Use of a separate network for VoIP
- Prioritisation on Ethernet level (Layer 2)
  - VLAN (Virtual LAN)
    - Standard IEEE 802.1Q
    - Priority levels
- Prioritisation on IP level (Layer 3)
  - QoS (Quality of Service)
    - Different service classes
    - Standard RFC3168
- Important: the prioritisation can only be guaranteed in the local network

VLAN – Virtual Networks

- Virtual LANs can only exist in a VLAN-aware network environment (Switches, etc).
- Splitting of physical networks into logical subnetworks.
- Switches that support VLAN ensure that packets of one VLAN are not forwarded to another VLAN.
  - More efficient use of bandwidth.
- 4 Byte of information is inserted into each Ethernet packet allowing the switch to assign the packet to a VLAN.

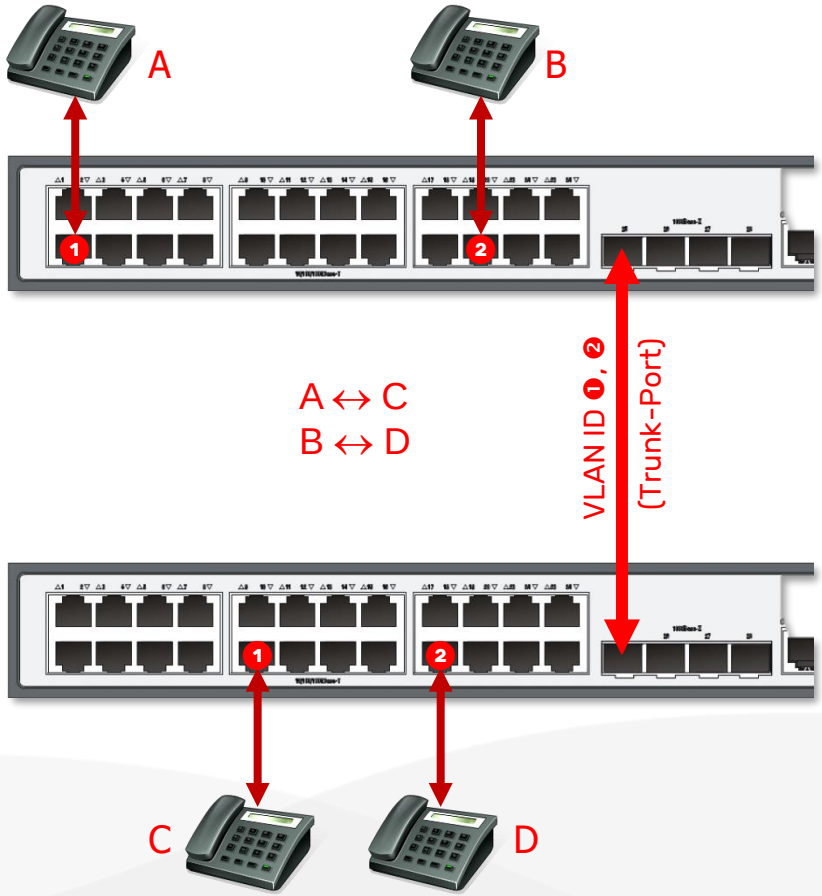
- Signalling of a priority class in a 3 bit field:

Priority	Bit pattern	Class of Service
0	000	No prioritization
1	001	Background services
2	010	Reserved
3	011	General data services
4	100	Control services
5	101	Video
6	110	Voice
7	111	Network control

- VLAN variants:
  - Static VLANs – Port-based, Untagged
  - Tagged VLANs

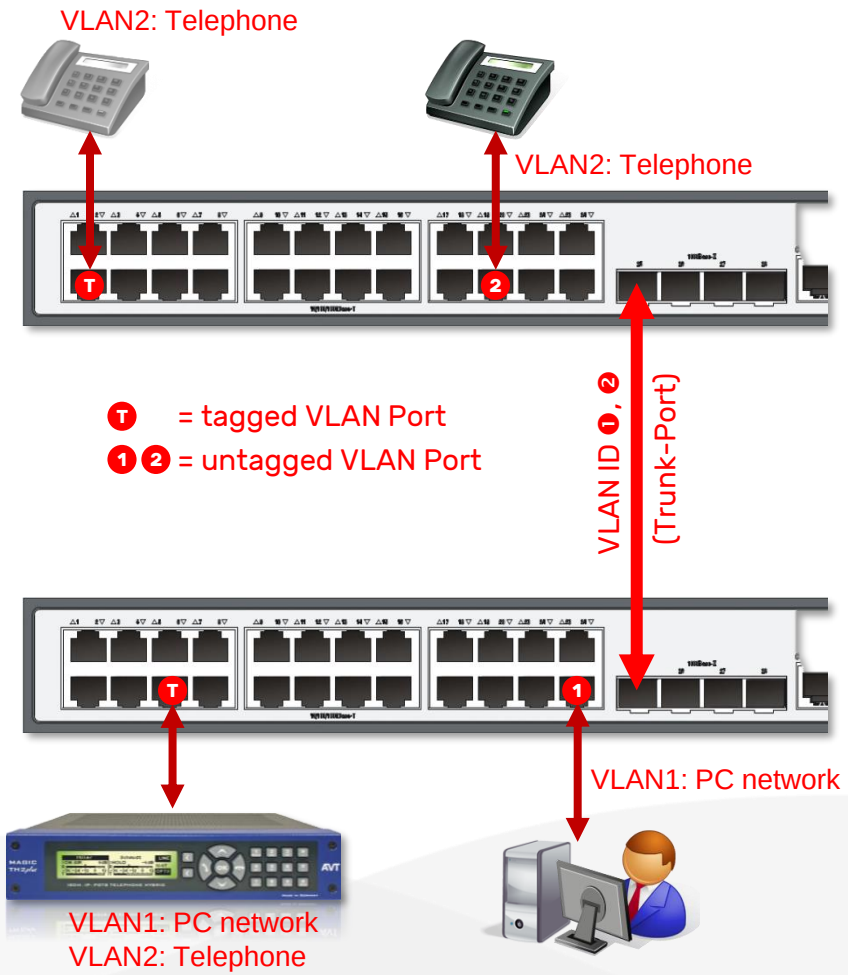
Port-based VLANs

- Dedicating a switch port to a single VLAN.
  - Only one VLAN can be assigned to a Switch Port
    - Exception: trunk ports
  - Only devices connected to switch ports that are serving the same VLAN can communicate with each other.
  - The switch adds the VLAN identifier to each received packet.
  - The switch removes the VLAN identifier from each packet to be sent.
  - The VLAN is completely transparent.
    - Connected devices don't need to support VLANs.
    - No payload restrictions.



Tagged VLANs

- Several VLANs can be assigned to one Switch Port.
- Connected devices must support VLAN:
  - Adding the VLAN identifier
  - Decoding the VLAN identifier
- Switches do not add or remove VLAN identifiers.
- Advantage of this solution: Systems with only one LAN interface can be connected to several virtual networks.
  - E.g. helpful when separating VoIP and PC zones.



QoS - Quality of Service on IP level

- End-to-end QoS is only possible when it is supported by all network elements.
- RFC2474 defines Differentiated Services (DiffServ), a mechanism to classify network traffic.
- The 8-bit Differentiated Services Field (DS-Field) is part of the IPv4 header. It contains:
  - DSCP: The 6-bit Differentiated Services Code Point is used to classify the payload of the IPv4 packet.
  - ECN: The remaining 2 Bits are reserved for flow control which is not supported by MAGIC THipPro. (default value = 0)

- Typical values used for VoIP are:
  - Voice (RTP)
    - DiffServ = 184dec
    - Corresponds to: DSCP = 46dec
  - SIP
    - DiffServ = 104dec
    - Corresponds to: DSCP = 26dec

DS field							
DSCP						ECN	
7	6	5	4	3	2	1	0

MAGIC THipPro

Integration of an IP Telephone Hybrid System into the studio environment

- Guidelines for migrating from ISDN to VoIP
- Basic requirements
- External VoIP Provider?
- Concepts

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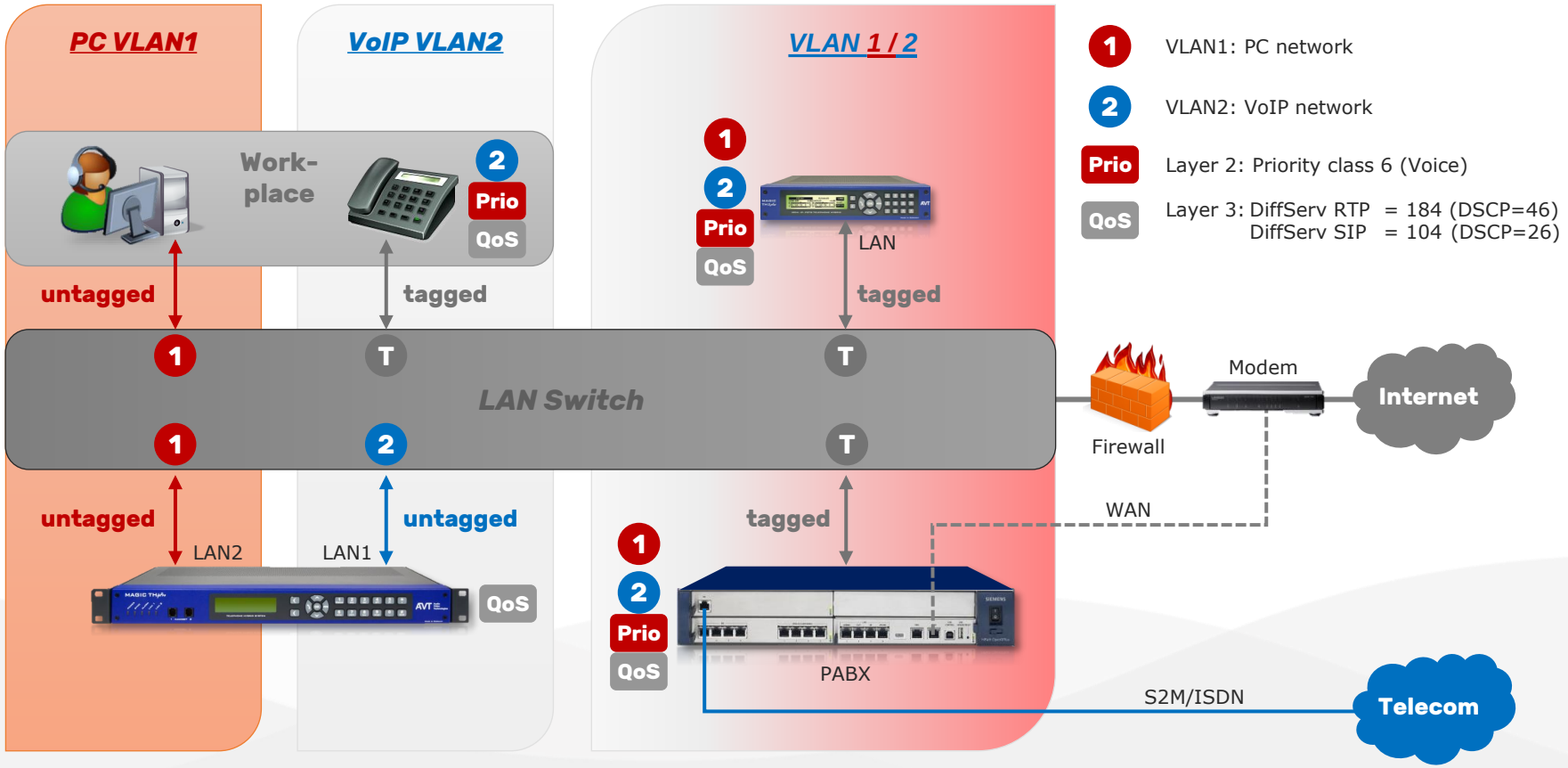
Basic requirements

- Separation of “PC“ network and VoIP telephone network
  - Use separate network interfaces.
  - Use VLAN with prioritization.
    - Many Switches already offer an integrated Voice VLAN configuration (Cisco, HP, Netgear etc.)
- Use QoS in the LAN.
- Avoid firewalls between PBX and VoIP systems/telephones.
- Minimize the number of Switches between the PBX and VoIP systems/telephones.
- Avoid VPN tunnels since they cause a higher latency and increase bandwidth requirements.
- Provide sufficient bandwidth for telephony in each part of the network.

VoIP Provider vs. ISDN PRI

- ISDN primary rate interfaces (PRIs) become rare. Often they are just adaptors to the providers VoIP network.
- Only native VoIP services support HD-Voice.
- Note: Deutsche Telekom transcodes mobile HD-Voice (AMR-WB) to landline HD-Voice (G.722) and vice versa in their network.
- Make sure to have call filtering in place either on the provider’s side or on a local PBX to handle high call volumes.

Network concept



MAGIC THipPro

Initial Setup

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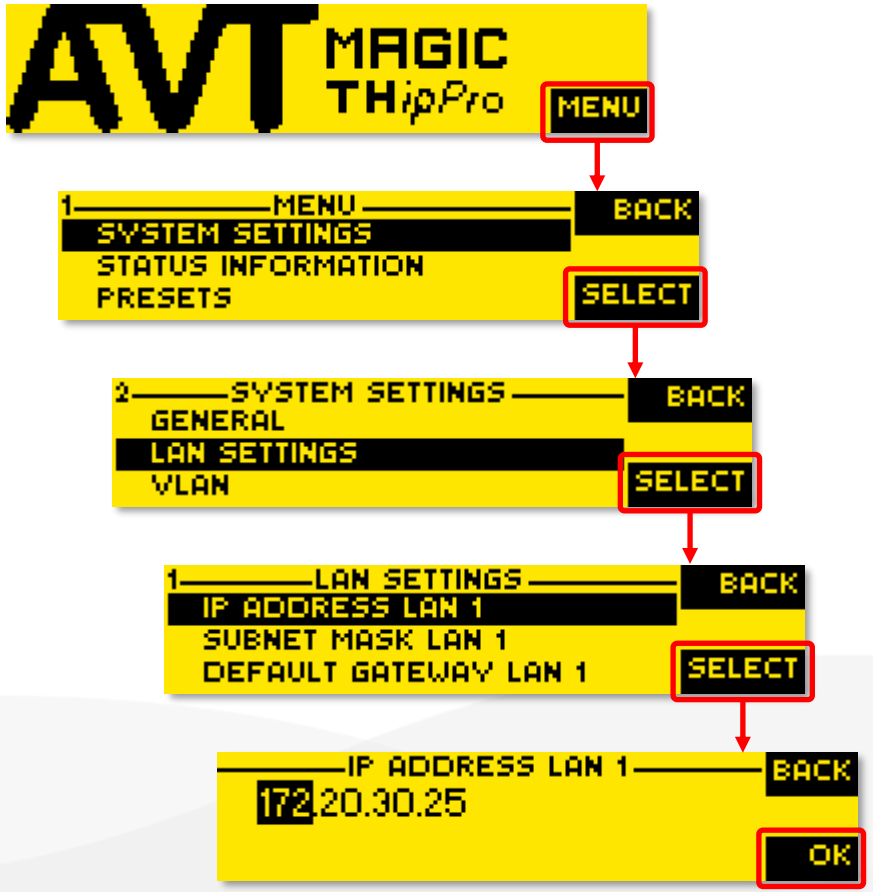
Initial Setup

- Connect the MAGIC THipPro to the mains.
- Configure the IP address of the LAN interface via the front display as shown on the right.
  - The MAGIC THipPro can be configured to use DHCP later via the PC software on the LAN INTERFACE configuration page.
- Subsequently also configure SUBNET MASK and DEFAULT GATEWAY of LAN interface 1.
- Connect the socket LAN 1 of the device with the Ethernet network and connect the PC software.
- All further configurations should be done using the PC software.



MAGIC THipPro

Connecting the software

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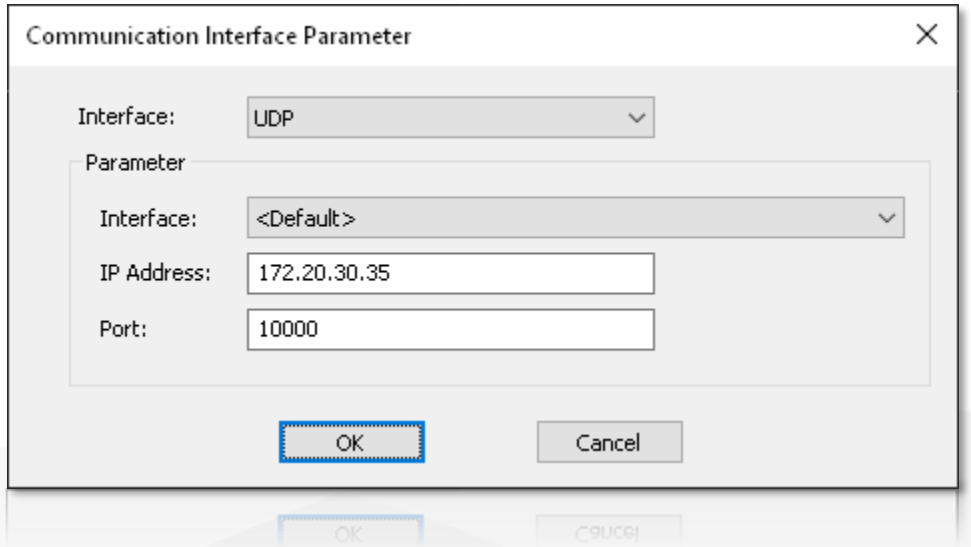
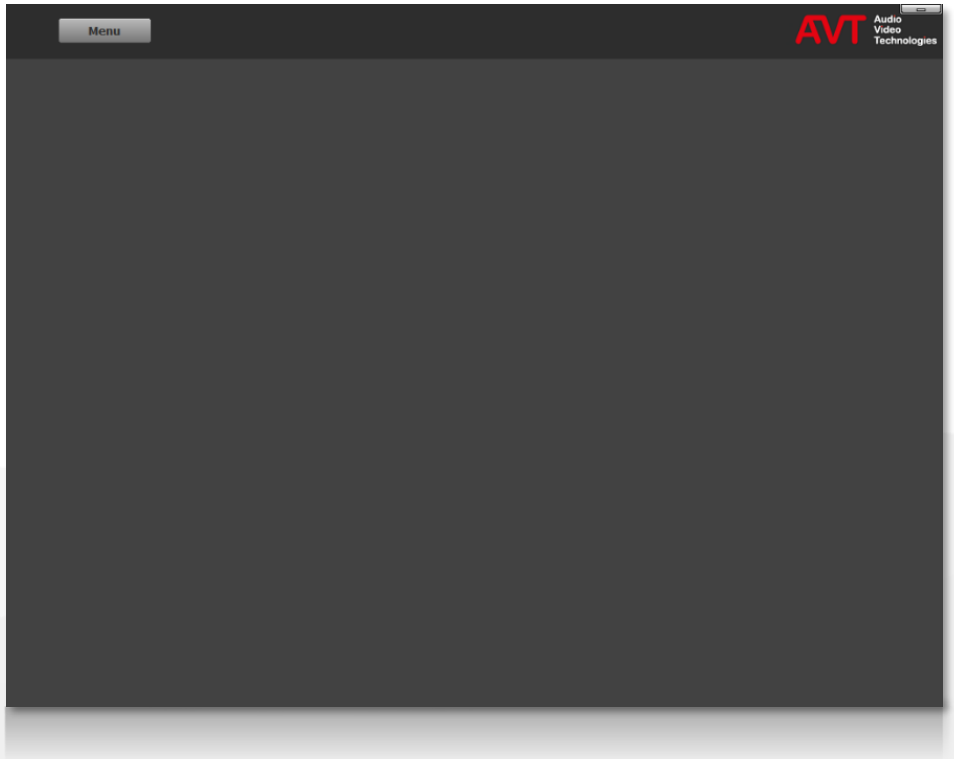
MAGIC THipPro LAN Client (1)

- Run the MAGIC THipPro LAN setup.exe to install the software.
- Run the software as administrator.
  - Right click the MAGIC THipPro LAN Client icon on the desktop and select Run as administrator.
- Connect the MAGIC THipPro to the local network.
- In the MAGIC THipPro LAN Client software open MENU – CONFIGURATION – CONTROL INTERFACE.
  - INTERFACE: Select UDP.
  - PARAMETER – INTERFACE: Select the network interface of the PC which has access to the unit.
  - PARAMETER – IP-ADDRESS: Enter the IP address of the MAGIC THipPro (default: 192.168.96.102).
    Get the current IP address from the MAGIC THipPro's front display by pressing the HANG UP button (to the right of the OK button) repeatedly.
  - PARAMETER – PORT: Enter the control port of the MAGIC THipPro (default: 10000).



MAGIC THipPro LAN Client (2)

- If the LAN Client software doesn't get an answer from the MAGIC THipPro it will show NO CONNECTION in the upper right corner.
- When the LAN Client software connects to a MAGIC THipPro with factory settings the main panel is empty.
- Click MENU – CONFIGURATION – SYSTEM to start configuring the MAGIC THipPro.

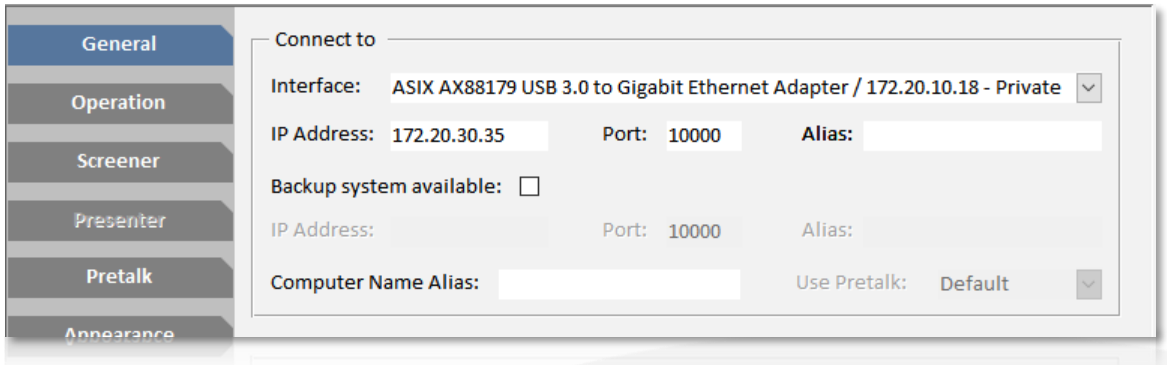


MAGIC THipPro News Desk

- Install the MAGIC THipPro LAN Client software on all PCs which act as News Desk Clients.
- Whether the LAN Client software acts as LAN Client or News Desk Client is distinguished by the system configuration on the CLIENT / SECURITY configuration page of the MAGIC THipPro.
- The LAN Client software adopts the role of the News Desk Client, if required, when it is connected to the system.

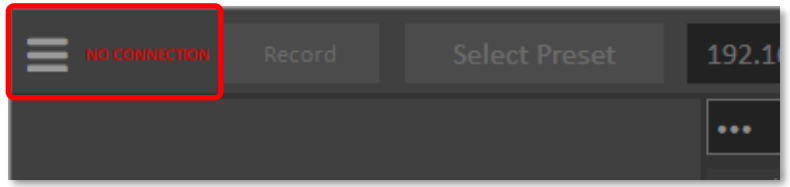
MAGIC THipPro Screener Software (1)

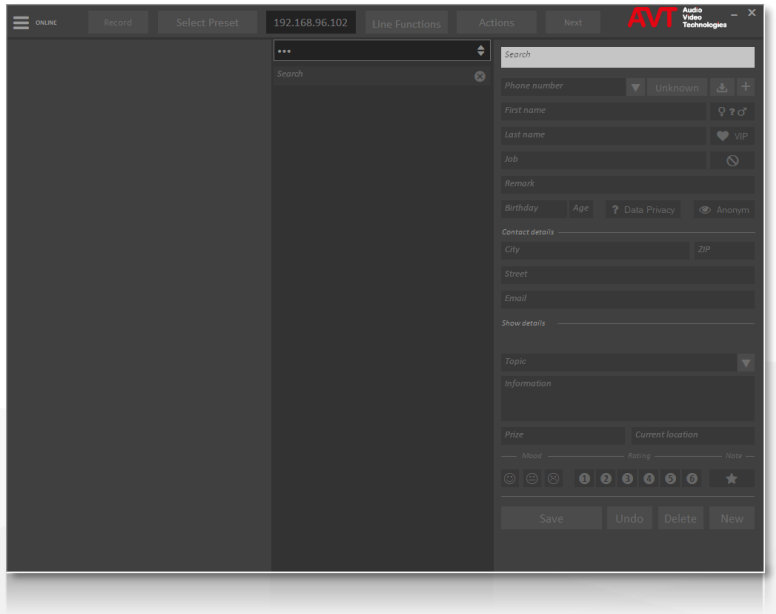
- Run the MAGIC THipPro Screener setup.exe to install the software.
- Run the software as administrator.
  - Right click the Screener Login icon on the desktop and select Run as administrator.
- Connect the MAGIC THipPro to the local network.
- Click the Menu icon ( ) in the top left corner and open LOCAL CONFIGURATION – GENERAL.
  - INTERFACE: Select the network interface of the PC which has access to the unit.
  - IP-ADDRESS: Enter the IP address of the MAGIC THipPro (default: 192.168.96.102). Get the current IP address from the MAGIC THipPro's front display by pressing the HANG UP button (to the right of the OK button) repeatedly.
  - PORT: Enter the control port of the MAGIC THipPro (default: 10000).
  - ALIAS: Optionally enter a name for the THipPro.



MAGIC THipPro Screener Software (2)

- If the Screener software doesn't get an answer from the MAGIC THipPro it will show NO CONNECTION in the upper left corner.
- When the Screener software connects to a MAGIC THipPro with factory settings the main panel is empty.
- Click MENU – SYSTEM CONFIGURATION to start configuring the MAGIC THipPro.

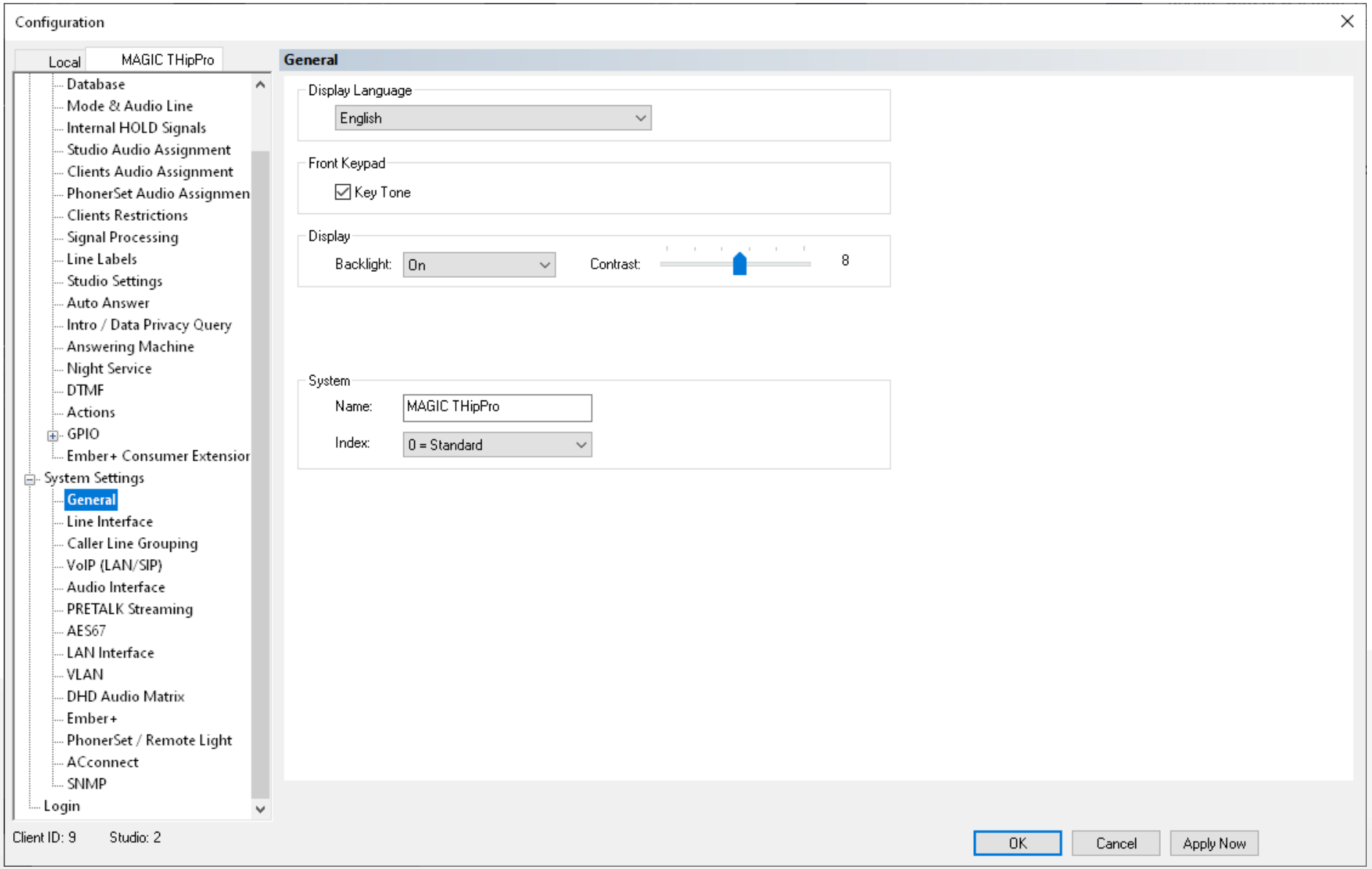




MAGIC THipPro

System Settings

info@avt-nbg.de
www.avt-nbg.de

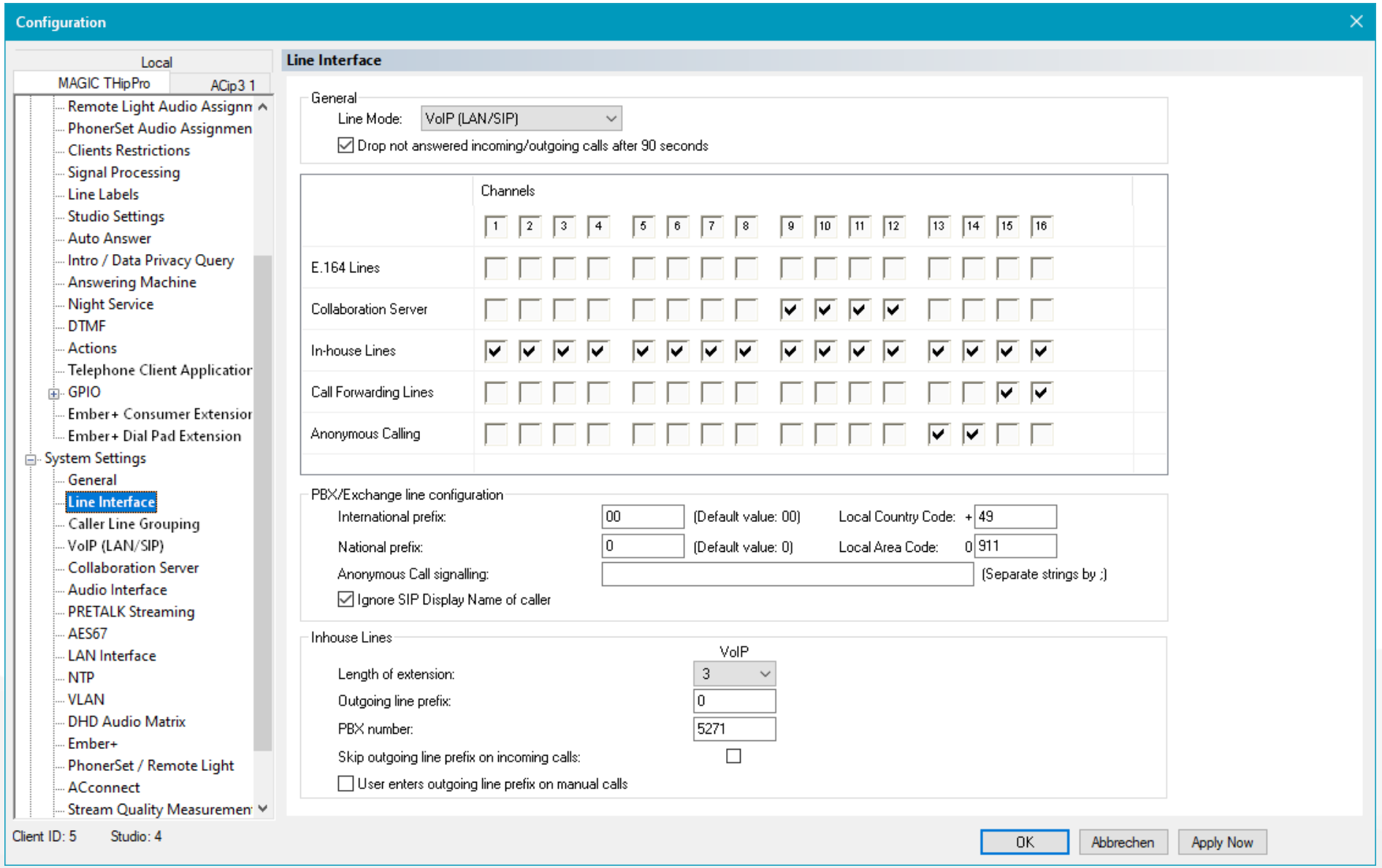

Configuration
Local
MAGIC THipPro
Database
Mode & Audio Line
Internal HOLD Signals
Studio Audio Assignment
Clients Audio Assignment
PhonerSet Audio Assignmen
Clients Restrictions
Signal Processing
Line Labels
Studio Settings
Auto Answer
Intro / Data Privacy Query
Answering Machine
Night Service
DTMF
Actions
GPIO
Ember+ Consumer Extensior
System Settings
General
Line Interface
Caller Line Grouping
VoIP (LAN/SIP)
Audio Interface
PRETALK Streaming
AES67
LAN Interface
VLAN
DHD Audio Matrix
Ember+
PhonerSet / Remote Light
ACconnect
SNMP
Login
Client ID: 9
Studio: 2
General
Display Language
English
Front Keypad
Key Tone
Display
Backlight:
On
Contrast:
8
System
Name:
MAGIC THipPro
Index:
0 = Standard
OK
Cancel
Apply Now

General (1)

- Configure the basic system parameters on the GENERAL page.
- DISPLAY LANGUAGE: The front display of the MAGIC THipPro supports two languages:
  - ENGLISH
  - GERMAN
- FRONT KEYPAD – KEY TONE: Enable the key click.
- DISPLAY: Set the parameters of the front display:
  - BACKLIGHT:
    - AUTO: Turns on when a key is pressed and turns off after a few seconds.
    - ON: Permanently on.
  - CONTRAST: Adjust the contrast to improve the clarity of the front display.

- SYSTEM
  - NAME: Enter a system name which is used:
    - to identify the device in the optional MAGIC SYSTEM MANAGER.
    - to address the device in the CONTROL INTERFACE configuration.
    - as the SIP display name.
    - request an IP address via DHCP.
    - to identify the system via the front display.
  - INDEX: The system index is only used if multiple MAGIC THipPro systems use the same phonebook. All systems connected to a common phonebook database will show the same phonebook entries. But call history entries are stored with the system index.
    - MAGIC THipPro systems with different indexes will not show each others call history.
    - MAGIC THipPro systems using the same index will show the same call history.

General (2)



Line Interface (1)

- Configure the basic parameters for connecting to the telephone network on the LINE INTERFACE page.
- LINE MODE: Specifies the type of telephone network the MAGIC THipPro is connected to.
  - VOIP (LAN/SIP): Voice over IP provides digital audio transmission over IP networks. The audio quality is automatically negotiated at call setup. MAGIC THipPro supports two algorithms:
    - G.711 (3.4 kHz audio bandwidth)
    - G.722 (HD-Voice, 7 kHz audio bandwidth with HD-Voice software upgrade).
    - For incoming calls, the MAGIC THipPro always uses the best algorithm which is supported by the calling station.
  - ISDN: Integrated Services Digital Network provides digital audio transmission. Requires the ISDN hardware upgrade. THipPro supports up to two ISDN modules with eight channels each.
  - POTS: Plain Old Telephone Service provides analogue audio transmission with 3.1 kHz audio bandwidth. Requires the POTS hardware upgrade which consists of two modules providing four channels each.
  - ISDN & VOIP (LAN/SIP): Mix ISDN and VoIP channels. The line mode may be specified for each channel separately. The number of ISDN and VoIP channels does not add up.
  - POTS & VOIP (LAN/SIP): Mix POTS and VoIP channels. The line mode may be specified for each channel separately. The number of ISDN and VoIP channels does not add up.

Line Interface (2)

- PERMANENT ACTIVATION OF ISDN LAYER 2: Activate this option if the first in a series of calls cannot be established or incoming calls are not detected. Only available in line modes ISDN and ISDN & VOIP (LAN/SIP).
- ENABLE ISDN HD CALL: Shows extra buttons for making ISDN calls using the HD-Voice (G.722) algorithm. ISDN HD is not compatible with standard ISDN telephones since it establishes an ISDN data connection. A call set up as data connection can not automatically switch to voice transmission. Only available in line modes ISDN and ISDN & VOIP (LAN/SIP) with activated HD-Voice license.

- ISDN PROTOCOL: Select the ISDN protocol supported by the PBX or ISDN provider. Only available in line modes ISDN and ISDN & VOIP (LAN/SIP).
  - EURO ISDN
  - USA ISDN (NI-1)
  - JAPANESE ISDN
- DROP NOT ANSWERED INCOMING/OUTGOING CALLS AFTER 90 SECONDS: The THipPro automatically ends unanswered calls after 90 seconds.

Line Interface (3)

- Specify parameters for each telephone line in the CHANNELS matrix:
  - E.164 LINES: Activate this option if the PBX requires the THipPro to dial numbers in an internationally unique format according to ITU-T recommendation E.164. (E.g., +49 911 5271 110)
  - COLLABORATION SERVER: Activate this option if the line should also register with the MAGIC Collaboration Server. The lines become available via Microsoft Teams. VoIP can be used in parallel on these lines.
  - IN-HOUSE LINES: Specify lines connected to a PBX. Required to distinguish between internal and external calls. Prefix digits for dialling external telephone numbers may automatically be inserted when configured in the PBX / EXCHANGE LINE CONFIGURATION .
  - IN-HOUSE LINES: Specify lines connected to a PBX. Required to distinguish between internal and external calls. Prefix digits for dialling external telephone numbers may automatically be inserted when configured in the PBX / EXCHANGE LINE CONFIGURATION .
  - CALL FORWARDING LINES: Required for network independent call forwarding. These lines don't appear on the main panel and are reserved for establishing connections to a forwarding destination. The line is blocked until all participants have hung up. The number of call forwarding lines determines the number of simultaneous calls that can be forwarded.
  - VOIP LINES: In a mixed mode with POTS or ISDN, check channels which should use the VoIP mode.
  - ANONYMOUS CALLING: Checked channels signal "Anonymous" instead of the phone number or Display Name to keep the number secret. Whenever possible, this should rather be configured in the PBX or on the providers side.
    - NOTE: Some VoIP providers / SIP servers block devices that hide their identity.

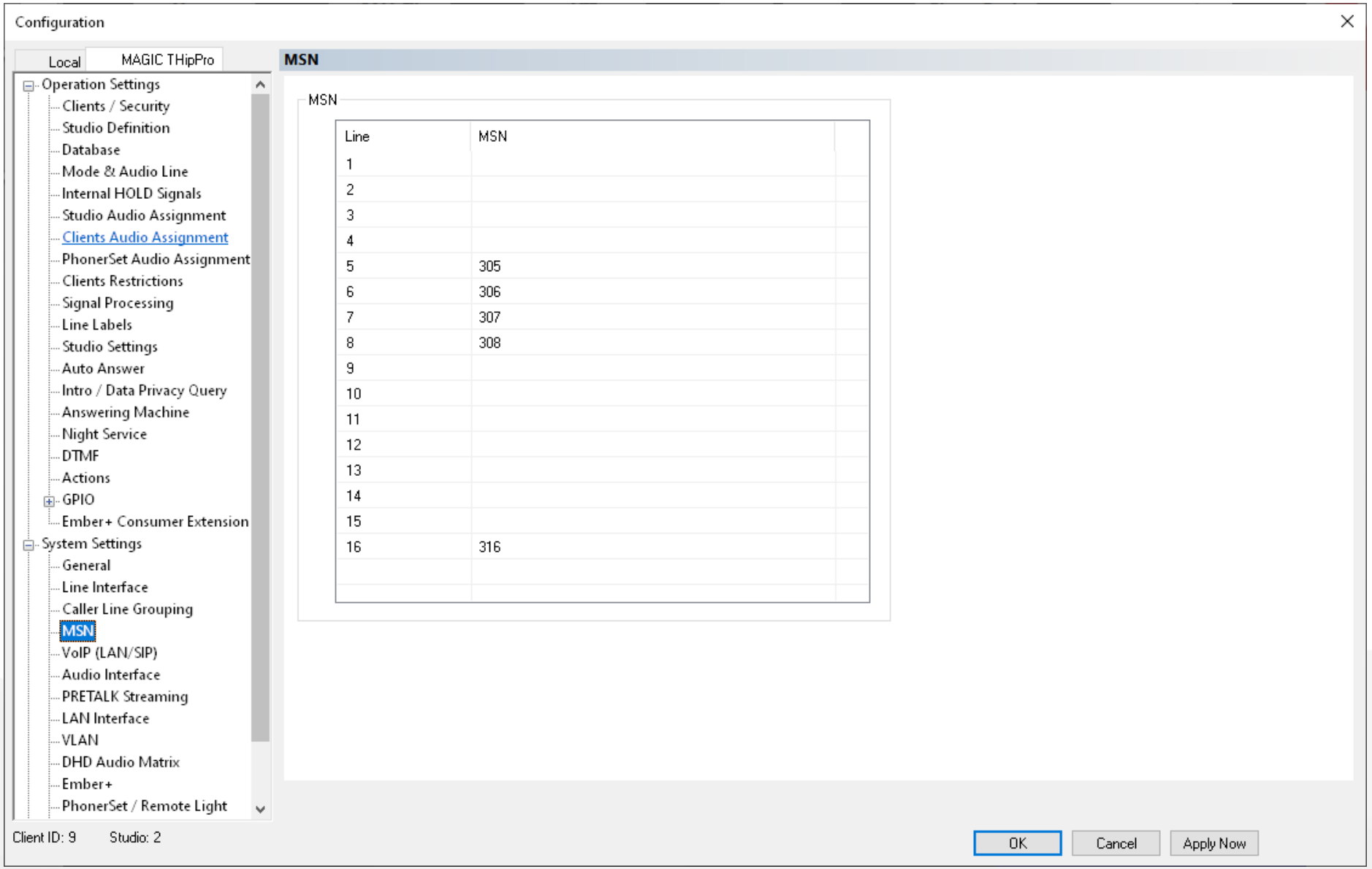
Line Interface (4)

- The PBX / EXCHANGE LINE CONFIGURATION section specifies the basic local telephone number formats.
  - INTERNATIONAL PREFIX: Prefix digits for dialling international telephone number. (default: “00”, don’t set to “+”)
  - NATIONAL PREFIX: Prefix digits for dialling long distance telephone numbers. (default: “0”)
  - LOCAL COUNTRY CODE: Required for E.164 mode. The THipPro adds the country code automatically to telephone numbers on outgoing calls if it is not provided by the user.
  - LOCAL AREA CODE: Required for E.164 mode. The THipPro adds the area code automatically to telephone numbers on outgoing calls if it is not provided by the user.
  - ANONYMOUS CALL SIGNALLING: If callers don’t want to disclose their phone number, the number is in most cases replaced by “Anonymous”. Other replacement texts are possible. If you enter these keywords here, the telephone book recognises that the caller wishes to remain anonymous.
  - IGNORE SIP DISPLAY NAME OF CALLER: VoIP calls signal not only the phone number but also the SIP DISPLAY NAME, which could be entered by the user. The MAGIC THipPro interprets the SIP display name as the caller’s name. However, often the SIP display name carries useless information. Therefore, the SIP display name is ignored when this setting is enabled.

Line Interface (5)

- The INHOUSE LINES section specifies the format of internal numbers and the numbers to connect to the outside world. These settings apply to channels marked as IN-HOUSE LINES.
  - LENGTH OF EXTENSION: Number of digits of internal phone numbers.
  - OUTGOING LINE PREFIX: Prefix digit inserted before the number to dial external phone numbers.
  - PBX NUMBER: The office / trunk number. Required in mixed line mode (ISDN/POTS & VoIP) or if some but not all channels are in-house lines.
  - SKIP OUTGOING LINE PREFIX ON INCOMING CALLS: Some PBXs signal the calling party's number including the prefix digits, some don't. Set this option so, that the number of incoming calls is displayed without the prefix digits in the PC software.
  - USER ENTERS OUTGOING LINE PREFIX ON MANUAL CALLS: Enable if the users should enter the prefix digits when dialling a number using the number pad. If unchecked the MAGIC THipPro adds the prefix digits automatically.

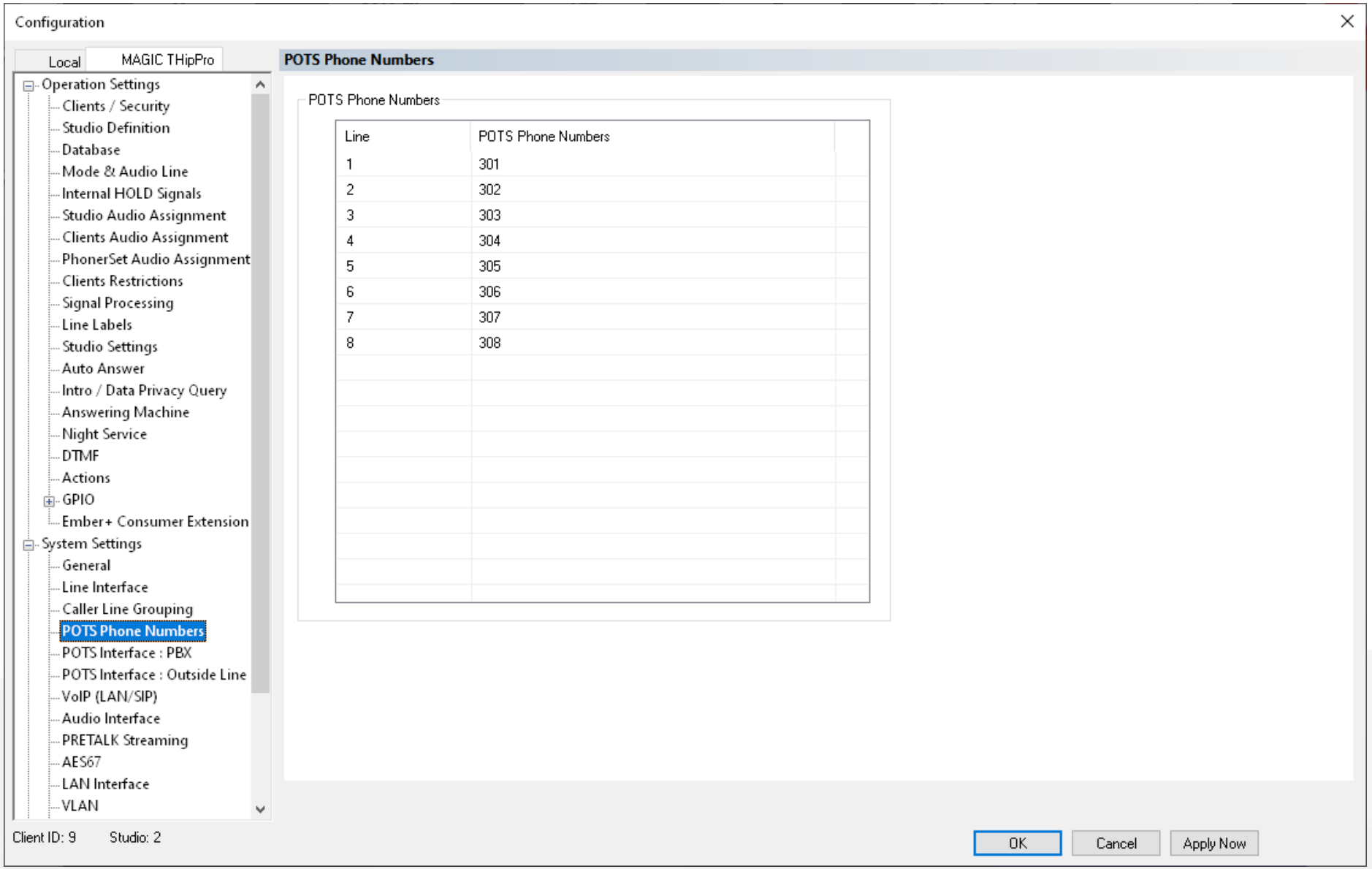
Line Interface (6)


Configuration
Local
MAGIC THipPro
Operation Settings
Clients / Security
Studio Definition
Database
Mode & Audio Line
Internal HOLD Signals
Studio Audio Assignment
Clients Audio Assignment
PhonerSet Audio Assignment
Clients Restrictions
Signal Processing
Line Labels
Studio Settings
Auto Answer
Intro / Data Privacy Query
Answering Machine
Night Service
DTMF
Actions
GPIO
Ember+ Consumer Extension
System Settings
General
Line Interface
Caller Line Grouping
MSN
VoIP (LAN/SIP)
Audio Interface
PRETALK Streaming
LAN Interface
VLAN
DHD Audio Matrix
Ember+
PhonerSet / Remote Light
Client ID: 9
Studio: 2
MSN
MSN
Line
MSN
1
2
3
4
5 305
6 306
7 307
8 308
9
10
11
12
13
14
15
16 316
OK
Cancel
Apply Now

MSN (1)

- The MSN page is displayed only if there are ISDN channels configured on the LINE INTERFACE page.
- Enter an MSN (**M**ultiple **S**ubscriber **N**umber) for each ISDN channel connected to the MAGIC THipPro.
  - The MSN sometimes is the internal telephone number (extension). For more information, refer to the PBX manual or the provider's documentation.

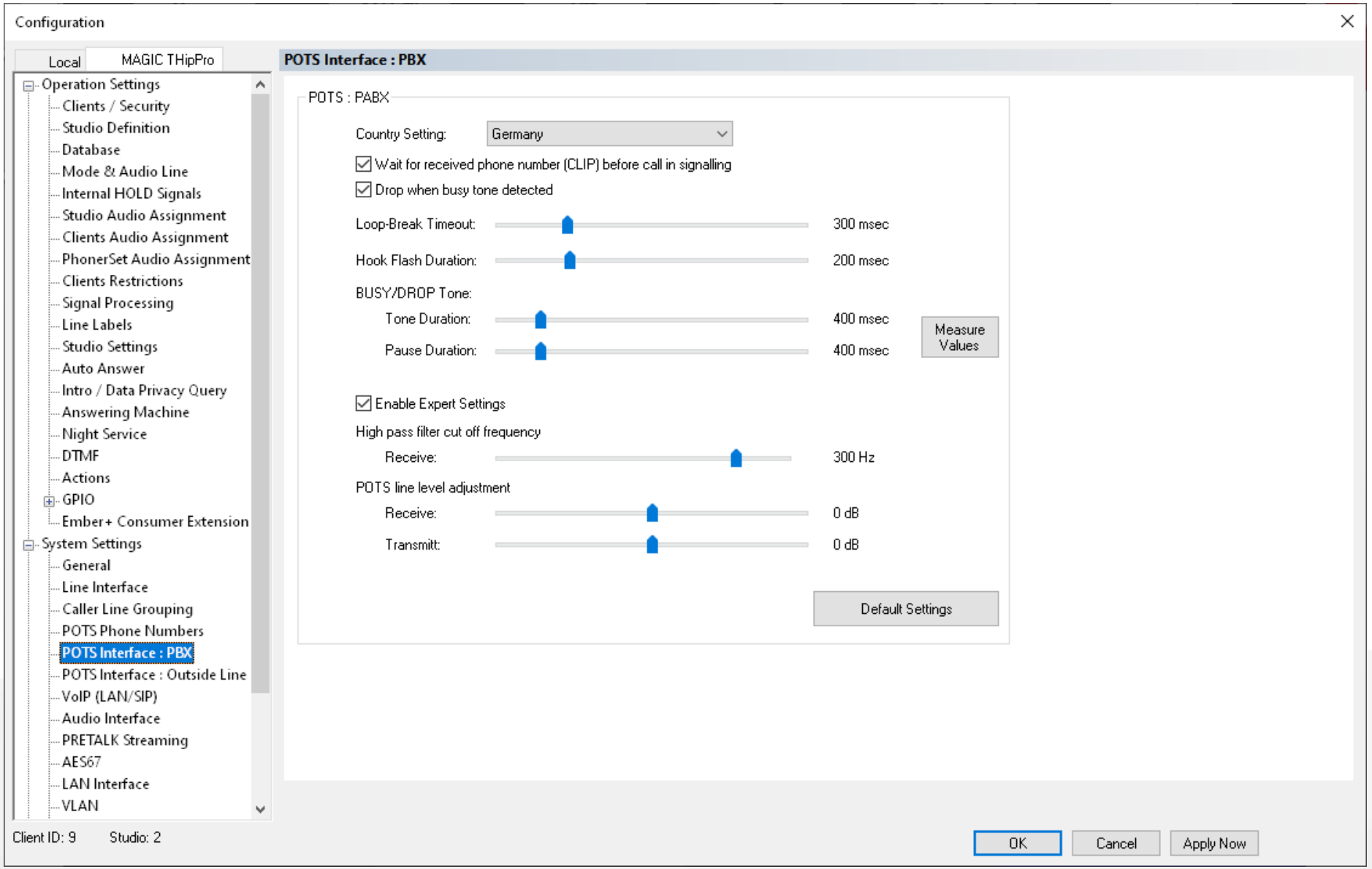
MSN (2)



POTS Phone Numbers (1)

- The POTS PHONE NUMBERS page is displayed only if there are POTS channels configured on the LINE INTERFACE page.
- There is no technical necessity to specify the POTS phone numbers.
- Enter the POTS phone numbers if you like to display them in the line labels. On the LINE LABELS page you may use the {lineid} wildcard to display the POTS phone number.

POTS Phone Numbers (2)



POTS Interface: PBX / Outside Line (1)

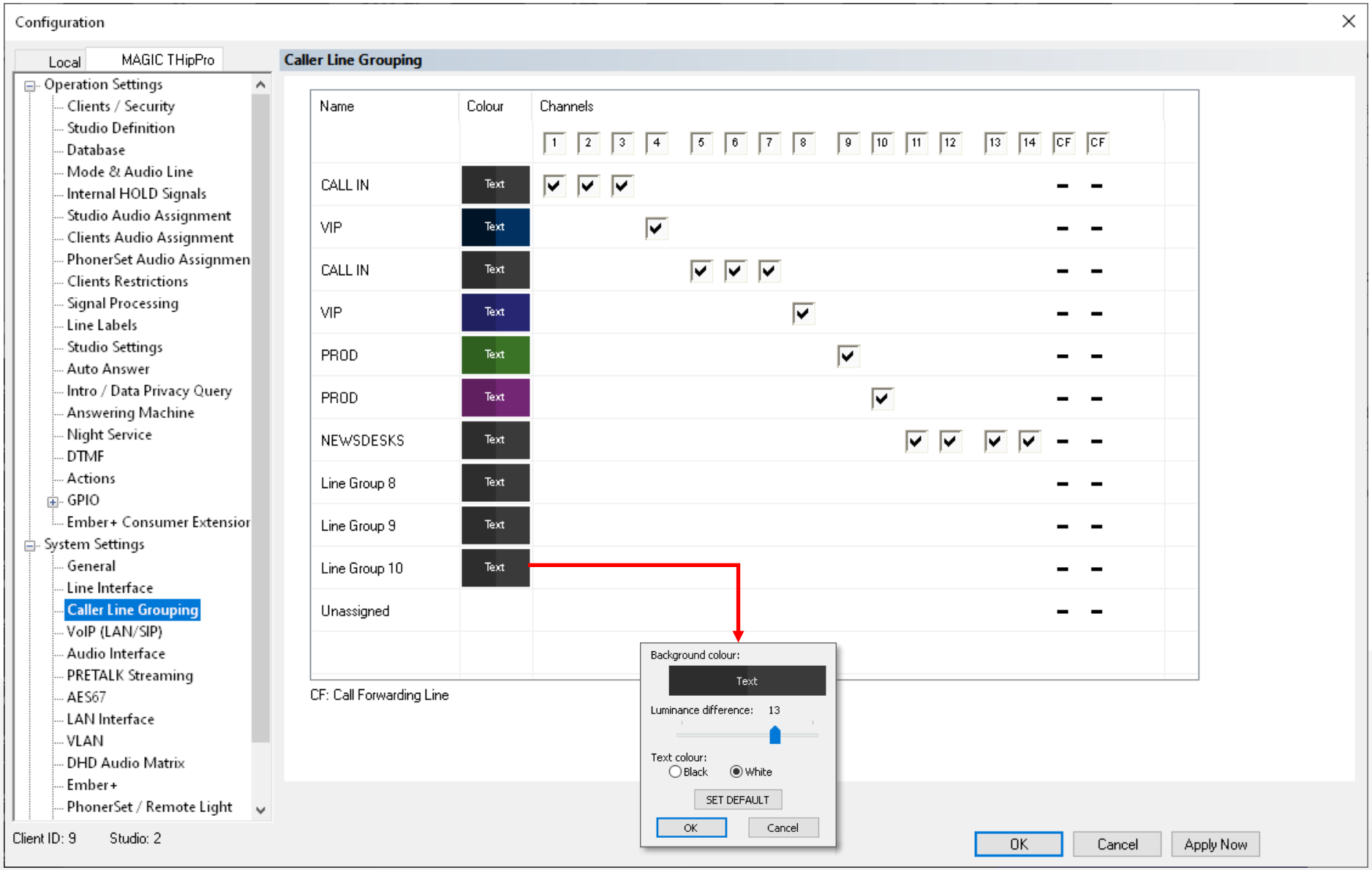
- The POTS INTERFACE pages are displayed only if there are POTS channels configured on the LINE INTERFACE page.
- The POTS interface parameters for channels connected to a PBX are configured on the POTS INTERFACE: PBX page.
- The POTS interface parameters for channels connected directly to the public telephone network are configured on the POTS INTERFACE: OUTSIDE LINES page.
- The parameters are the same for both variants:
  - COUNTRY SETTING: Defines the POTS interface's impedance. Finding the correct setting is crucial to minimize echo. Set the country of your location or use the country of manufacture of the PBX as a guideline.
  - WAIT FOR RECEIVED PHONE NUMBER (CLIP) BEFORE CALL IN SIGNALLING: The calling party's phone number is signalled between the first and the second ringing. Enable this setting the incoming call should be ignored until the second ringing. The call will be visible from the second ringing even if no phone number is detected.
  - DROP WHEN BUSY TONE DETECTED: Enable if the system should drop the call automatically when the disconnected tone (busy tone) is heard on the telephone line. You may define a custom tone or the measure the tone in the BUSY / DROP TONE section.
  - LOOP-BREAK TIMEOUT: Defines the minimum time the loop current of the telephone line must be interrupted for the MAGIC THipPro to drop the call. Short interrupts are used to signal events in the network (e.g. initiate call forwarding). Longer interrupts indicate a problem in the network. When the timeout is set too low, accidental disconnects may happen. (default: 300ms)
  - HOOK FLASH DURATION: A hook flash signals the network that a device wants to forward a call. Adjust the hook flash duration if there are problems forwarding calls.

POTS Interface: PBX / Outside Line (2)

- BUSY / DROP TONE: The MAGIC THipPro can detect if the remote station has hung up. It is monitoring the audio signal for a sequence of tones and pauses with defined duration. The sequence might be different for every PBX or provider.
  - TONE DURATION: Specify a custom tone duration.
  - PAUSE DURATION: Specify a custom pause duration.
  - MEASURE VALUES: Click the button to measure the actual sequence and set it as custom tone and pause duration. To measure the values correctly make sure the drop tone can be heard on the first telephone line connected to the PBX or to the public network, respectively.

- ENABLE EXPERT SETTINGS: Help to improve the audio signal on telephone lines with difficult line characteristics.
  - HIGH PASS FILTER CUT-OFF FREQUENCY – RECEIVE: Sounds below this frequency are filtered out (e.g. low frequency hum).
  - POTS LINE LEVEL ADJUSTMENT
    - RECEIVE: Increase the value to amplify the audio signal coming in from the telephone line. Decrease the value if the audio is distorted.
    - TRANSMIT: Increase the value to send a louder signal. Decrease the value if the audio signal sounds distorted at the remote station.
- DEFAULT SETTINGS: Resets all values on the page to factory settings.

POTS Interface: PBX / Outside Line (3)



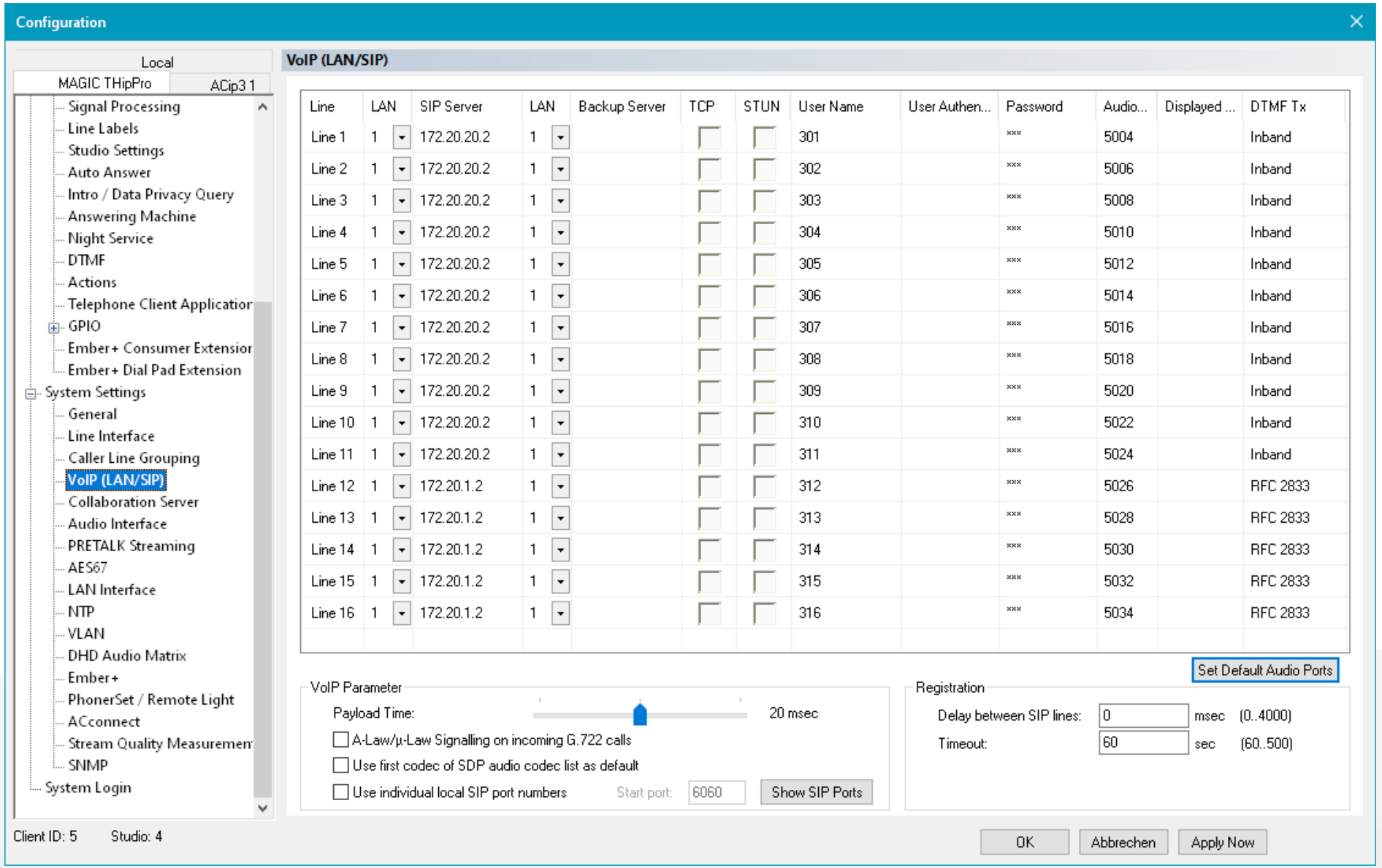
Caller Line Grouping (1)

- Bundle telephone lines into groups on the CALLER LINE GROUPING page.
- Telephone lines of a group have:
  - the same configurable background colour.
  - a common button on the main panel for:
    - dropping calls.
    - locking lines.
    - enabling Voice Disguise.
    - enabling Night Mode.
    - enabling the Answering Machine.
  - a common audio line for Auto Answer.
  - common Intro / Data Privacy Query parameters.
  - additional GPIO functions.
- NAME: Enter a name for the line group.
- COLOUR: Define the colours for each line group. Click the coloured rectangle to open the colour configurator:
  - BACKGROUND COLOUR: Click the coloured rectangle to select a background colour for the channels.
  - LUMINANCE DIFFERENCE: Side by side channels are easier to identify if they have slightly different colors. This setting changes the brightness of the selected background color for every second channel.
  - TEXT COLOUR: Set the colour of all text displayed on the selected background colour to BLACK or WHITE.
  - SET DEFAULT: Set all colours to default values.

Caller Line Grouping (2)

- CHANNELS: Assign channels to line groups:
  - Each channel can only be assigned to one line group.
  - Channels of a line group need not to be continuous.
  - Channels not assigned to a specific line group remain in the UNASSIGNED line group.
  - The line group UNASSIGNED has all the characteristics of the other line groups except the color choices.
  - Call forwarding lines (CF) can not be assigned to a line group.

Caller Line Grouping (3)



VoIP (LAN/SIP) (1)

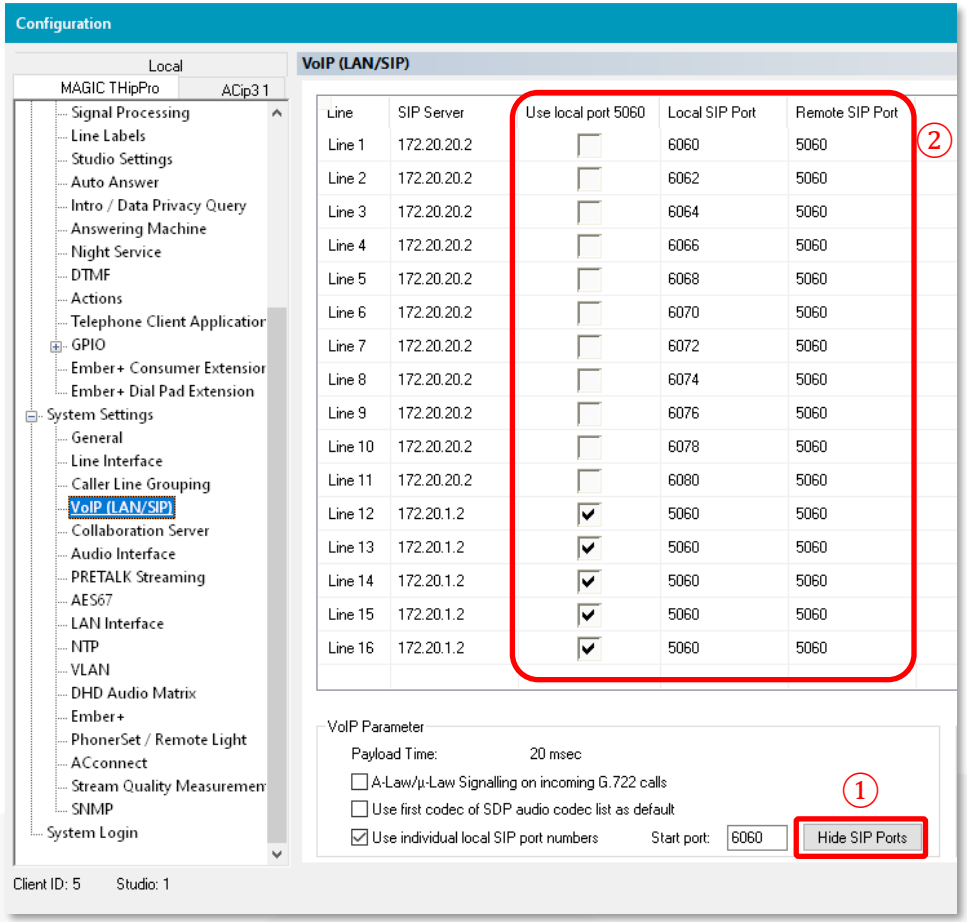
- Enter the SIP credentials for each telephone line as well as SIP protocol parameters on the VOIP (LAN/SIP) page.
- The MAGIC THipPro provides up to 16 VoIP channels which are completely independent from each other. The parameters must be defined for each VoIP line:
  - LINE: Shows the number of the telephone line.
  - LAN: LAN interface of the MAGIC THipPro which connects to the primary SIP server.
  - SIP SERVER: Primary SIP server. May consist of three parts. Only SIP-Server is mandatory: proxy@SIP-Server:port
    - PROXY: IP address or host name of the proxy server.
    - SIP-SERVER: Also referred to as REALM or REGISTRAR. IP address or host name.
    - PORT: Server port of the SIP protocol. May be omitted if the default port 5060 is used.
  - LAN: LAN interface of the MAGIC THipPro which connects to the backup SIP server.
  - BACKUP SERVER: The MAGIC THipPro monitors constantly if the primary SIP server is available. If not it switches to the backup SIP server. When the primary SIP server becomes available again, the MAGIC THipPro switches back to the primary SIP server. See SIP SERVER for more information.
  - TCP: Enable to use TCP to connect to the SIP server. Otherwise UDP is used.
  - STUN: Enable if STUN is required by the SIP server. Specify the STUN server for the LAN interfaces of primary and backup SIP server on the LAN INTERFACE page.

VoIP (LAN/SIP) (2)

- USER NAME: Identifies the SIP account. Sometimes the user name is the phone number of the extension or the public phone number.
- USER AUTHENTICATION: Identifies the user account if a password is needed to access a SIP server. When the user authentication field is left blank, the device will use the user name for authentication.
- PASSWORD: The password for the SIP account.
- AUDIO PORT (UDP): Local UDP port for the audio transmission of this VoIP channel. It is recommended to use only straight numbers. (default: 5004,5006, 5008, …)
  - SET DEFAULT AUDIO PORTS: Sets the audio ports (UDP) to their default values)
- DISPLAYED NAME: Text entered here will be displayed on the telephones of the callers. Note that PBXs or providers may override the displayed name.
- DTMF TX: DTMF tones are used if you want to transmit digits such as pin codes via a telephone system. With VoIP, there are several ways to transmit DTMF tones. The THipPro supports the transmission via an INBAND audio signal or via RFC2833. Change this setting if receivers such as conference systems do not accept the code.
- VOIP PARAMETER:
  - PAYLOAD TIME: Set the size of transmitted audio packets. Lower values will decrease delay. Higher values will lower the data rate due to reduced overhead. (Fixed to 20 ms for best compatibility with public telecommunication providers)
  - A-LAW/µ-LAW SIGNALLING ON INCOMING G.722 CALLS: Enable this settings if audio is missing or broken when forwarding calls or when receiving forwarded calls. This problem might occur when one of the participants is not capable of HD-Voice (G.722) and the PBX is not aware of that.
  - USE FIRST CODEC OF THE SDP AUDIO CODEC LIST AS DEFAULT: Enable this settings if phones call which announce a list of supported audio codecs but only work when the MAGIC THipPro selects the first algorithm from the list.

VoIP (LAN/SIP) (3)

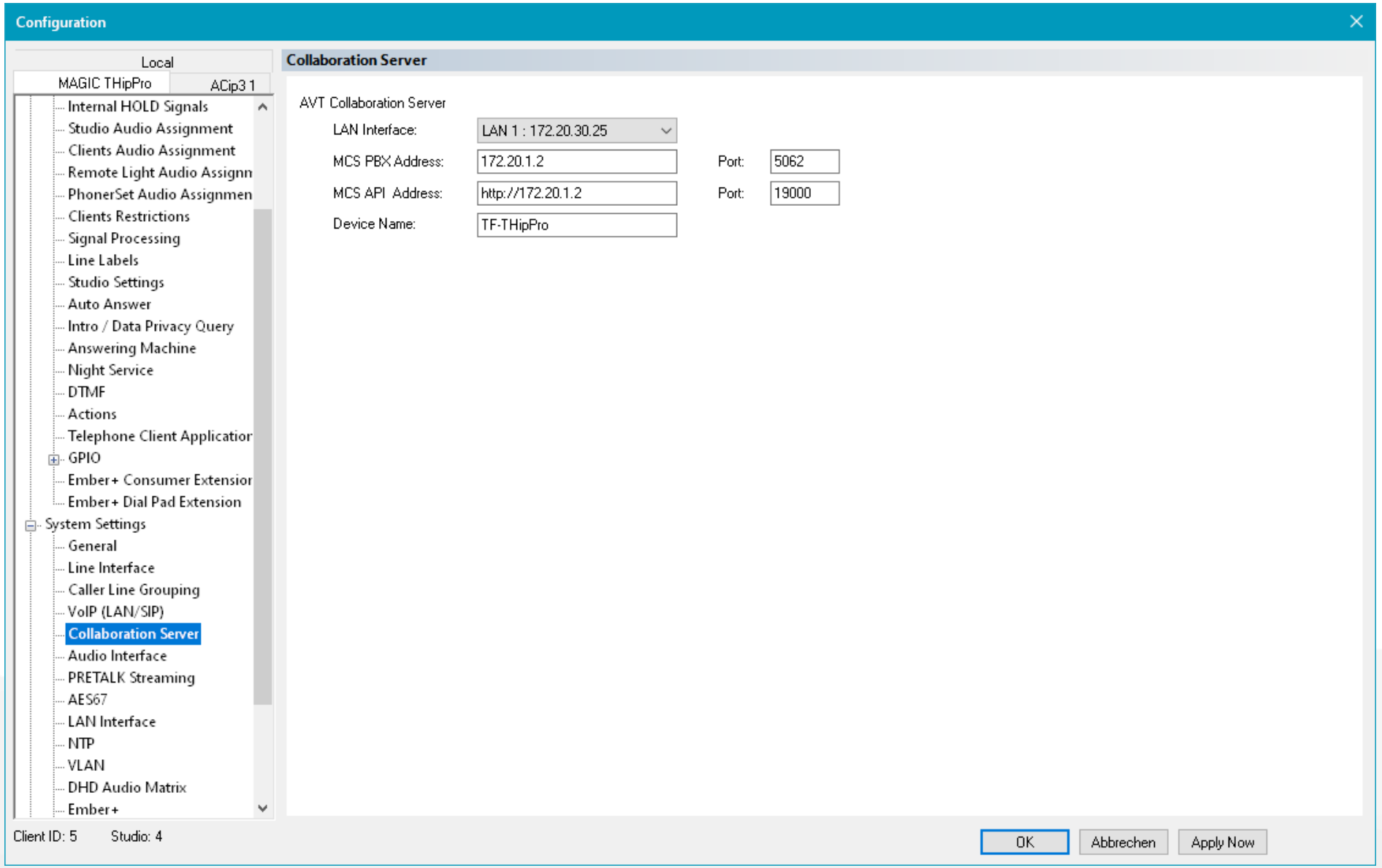
- USE INDIVIDUAL LOCAL SIP PORT NUMBERS: Enable this setting if a SIP server requires the MAGIC THipPro to use a different local SIP port for each VoIP line.
  - START PORT: SIP port used for the first VoIP channel. Further VoIP channels get straight SIP ports in ascending order. Try to avoid having port 5060 assigned to one of the lines.
  - SHOW / HIDE SIP PORTS ①: Click to show the automatically assigned SIP ports in the table above ②. Click again to change the view of the table again. The view also changes back again after 20 seconds with no user input.
- TABLE IN PORT VIEW
  - LINE: Shows the number of the telephone line.
  - SIP SERVER: Primary SIP Server. The remote SIP port can be changed here by appending ":<port>"
  - USE LOCAL PORT 5060: Enable for lines which must not use individual SIP port numbers.
  - LOCAL SIP PORT: Shows the local SIP port assigned to the VoIP line. Ports are derived from the START PORT or local port 5060 is used if enabled.
  - REMOTE SIP PORT: Shows the remote SIP port assigned to the VoIP line. Change the port in the SIP SERVER column.



VoIP (LAN/SIP) (4)

- REGISTRATION: These settings control the SIP registration process at the SIP server.
  - DELAY BETWEEN SIP LINES: During start-up MAGIC THipPro simultaneously sends a SIP registration telegram for each VoIP channel to the SIP server. If this is overwhelming the SIP server this setting introduces a delay between the VoIP channels.
  - TIMEOUT: The MAGIC THipPro renews the SIP registration every 60 seconds by default to check if the SIP server is still available. Increase the interval if the SIP server rejects the registration telegrams as too soon.

VoIP (LAN/SIP) (5)

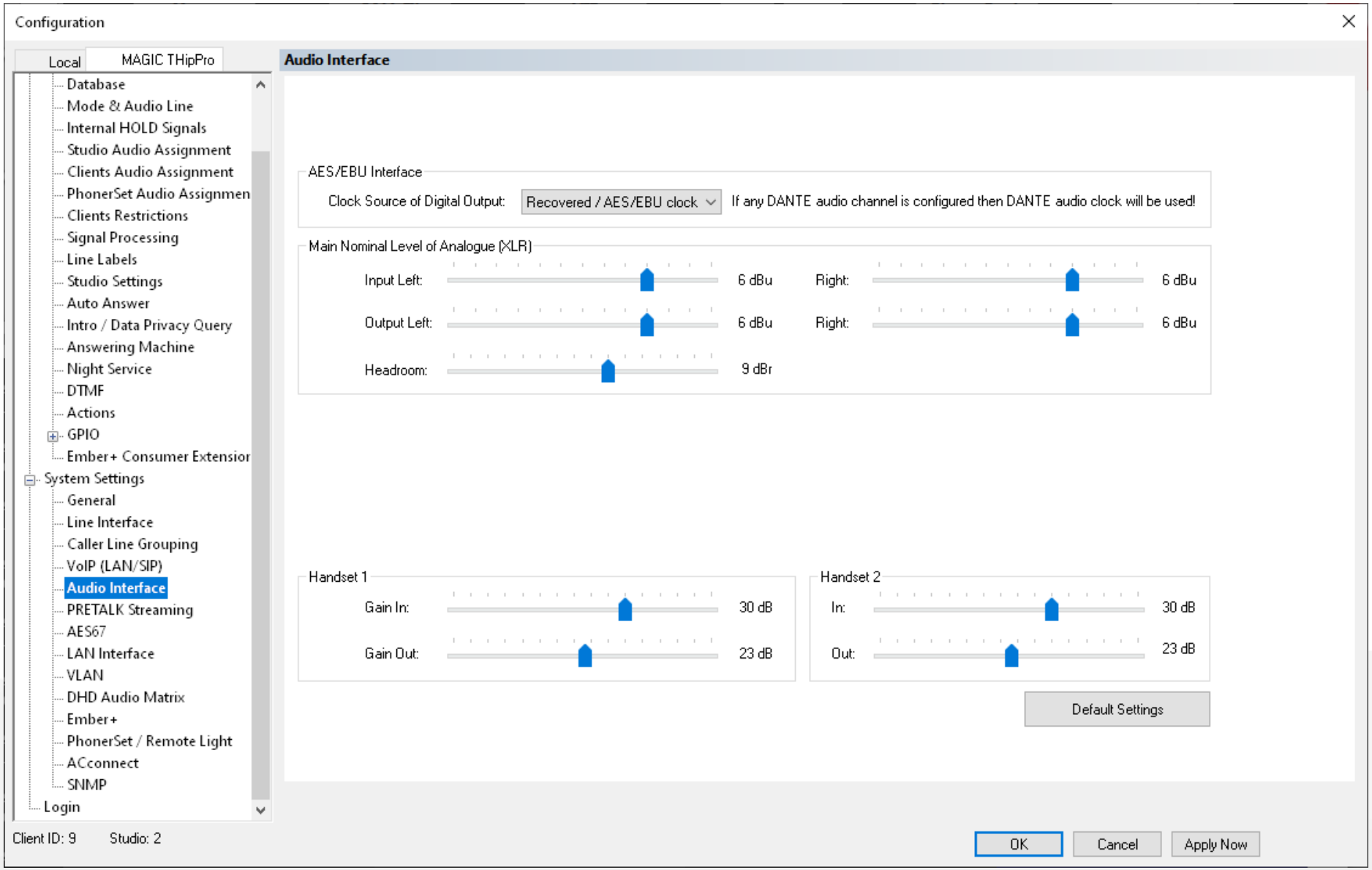


Collaboration Server (1)

- The MAGIC Collaboration Server (MCS) is a server application developed by AVT that let's the THipPro connect to Microsoft Teams. You can make and receive calls within your organisation as well as participate in MS Teams meetings.
- On the COLLABORATION SERVER configuration page the connection between the THipPro and the collaboration server is configured.
- Define the telephone lines which should operate as MS Teams lines in parallel to VoIP on the LINE INTERFACE configuration page.
- The connection to a collaboration server consists of two parts:
  - PBX: The audio transmission and call control between server and THipPro
  - API: The management of MS Teams contacts and meetings for the THipPro clients.

- LAN INTERFACE: Select the LAN interface of the MAGIC THipPro which should be used to connect to the collaboration server.
- MCS PBX ADDRESS and PORT: Enter the IP address and port of the PBX channel of the collaboration server.
- MCS API ADDRESS and PORT: Enter IP address and port of the API channel of the collaboration server.
- DEVICE NAME: Account name for the THipPro at the collaboration server.

Collaboration Server (2)



Audio Interface (1)

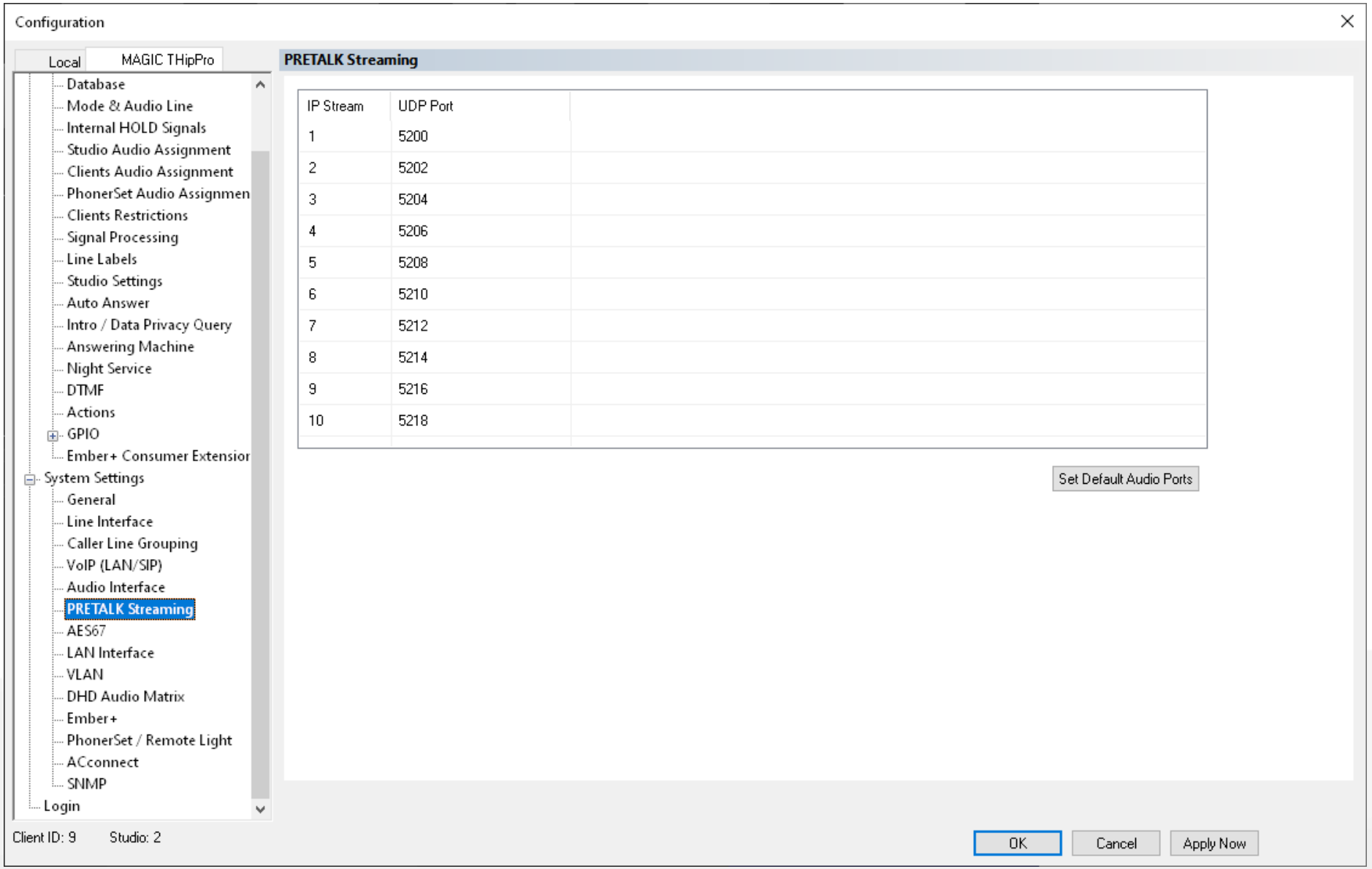
- Set the parameters of the analogue and digital audio interfaces on the AUDIO INTERFACE page.
- AES/EBU INTERFACE - CLOCK SOURCE OF DIGITAL OUTPUT: The MAGIC THipPro provides sample rate converters only on the AES/EBU inputs. The AES/EBU outputs run on the systems audio clock. Systems connected to the MAGIC THipPro via AES/EBU may be required to have sample rate converters on their inputs. This setting specifies the clock to which the system's audio clock is synchronized. Some of the options may be unavailable depending on modules equipped, line mode or audio over IP settings.
  - INTERNAL: Synchronize to the clean internal clock .
  - INTERNAL / DANTE CLOCK: Synchronize to Dante clock if a Dante module is equipped and configured, otherwise the internal clock is used.
  - INTERNAL / RAVENNA CLOCK: Synchronize to Ravenna clock if a Ravenna module is equipped and configured, otherwise the internal clock is used.
  - INTERNAL / PTP CLOCK: Synchronize to the AES67 clock if AES67 is enabled, otherwise the internal clock is used.
  - INTERNAL / ISDN CLOCK: Synchronize to ISDN clock if an ISDN module is equipped and configured, otherwise the internal clock is used.
  - EXTERNAL / CLOCK 1: Synchronize to the external clock supplied through the CLOCK 1 socket on the rear panel of MAGIC THipPro.
  - RECOVERED / AES/EBU CLOCK: Synchronize to the clock of the audio signal supplied through the first AES/EBU inputs where a signal is detected.

Audio Interface (2)

- MAIN NOMINAL LEVEL OF ANALOG (XLR): Use these parameters to adjust the level of analogue audio signals to match the level of the digital audio inputs and outputs.
  - INPUT LEFT / RIGHT: Set the sensitivity of the audio inputs. Decreasing the value increases the audio level and vice versa. (default: 6dBu)
  - OUTPUT LEFT / RIGHT: Set the gain of the audio outputs. Decreasing the value decreases the audio level and vice versa. (default: 6dBu)
  - HEADROOM: Increase the headroom to decrease the analogue audio levels of the inputs to create a safety zone for internal audio mixing. Prevents the audio signal from clipping in the internal mixer. The analog output signal is amplified by the headroom. (default: 9 dBr)

- HANDSET 1/2: Set the audio levels of the handset interfaces on the front panel of the MAGIC THipPro.
  - GAIN IN: Set the input gain for the receiver
  - GAIN OUT: Set the output gain for the transmitter.
- DEFAULT SETTINGS: Click to set all the levels to the default values.

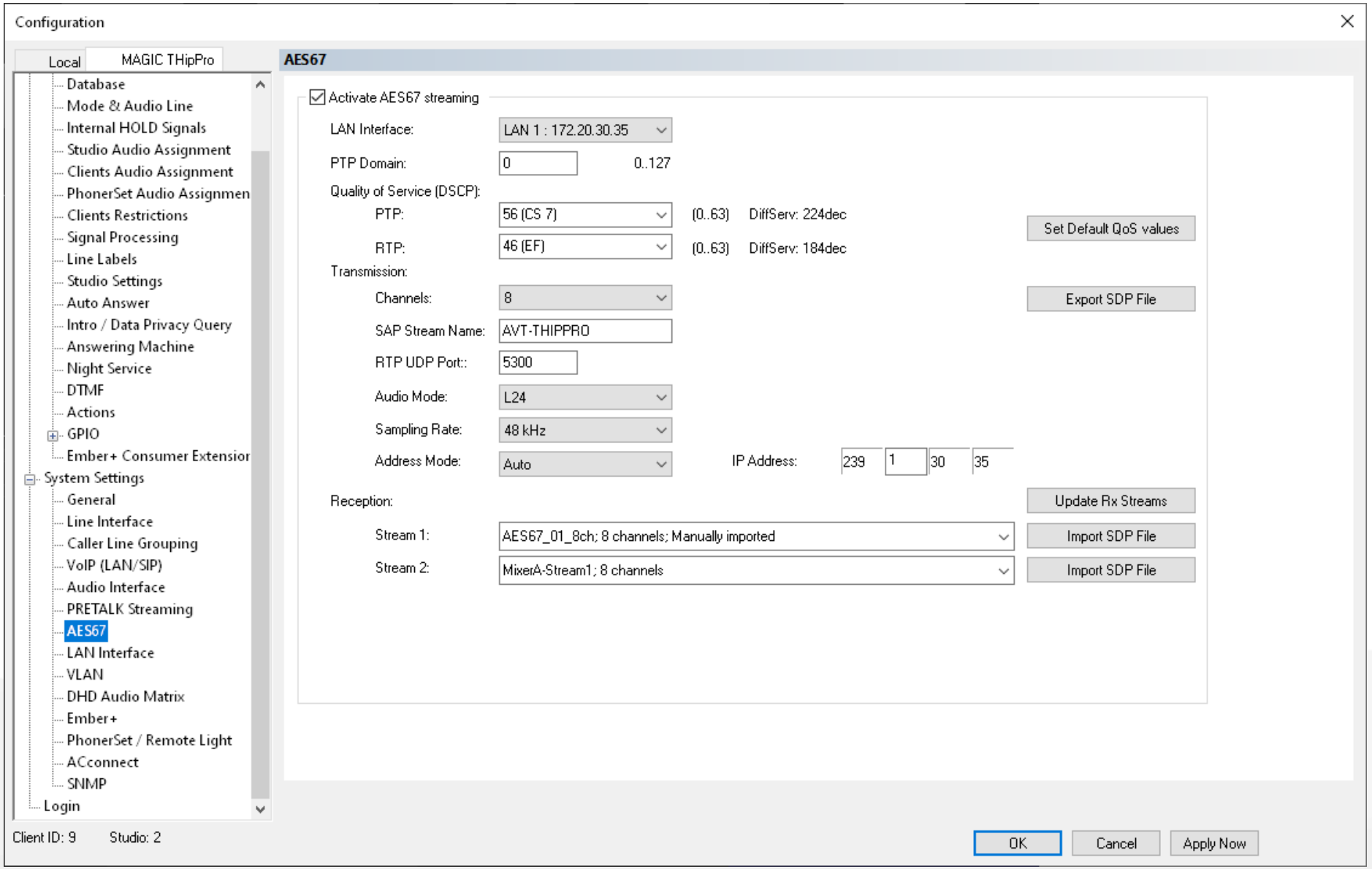
Audio Interface (3)



Pretalk Streaming (1)

- Configure the technical parameters of pretalk audio streaming on the PRETALK STREAMING page.
  - IP STREAM: Up to 10 streams are available. Depending on the number of licenses purchased.
  - UDP PORT: Local UDP port for the audio stream. (default: 5200, 5202, 5204, …)
  - SET DEFAULT AUDIO PORTS: Reset all UDP ports back to default settings.

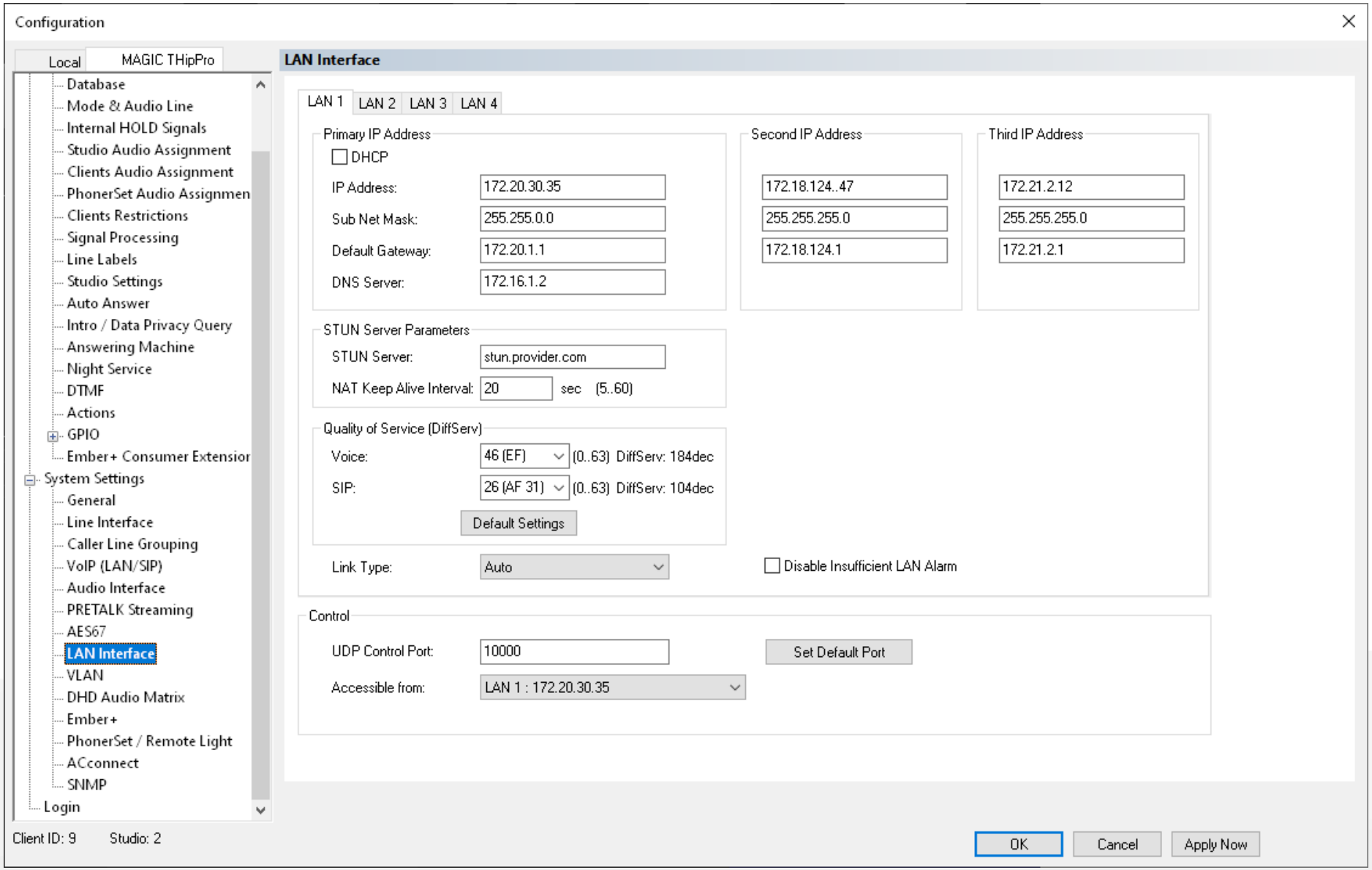
Pretalk Streaming (2)


Configuration
Local
MAGIC THipPro
Database
Mode & Audio Line
Internal HOLD Signals
Studio Audio Assignment
Clients Audio Assignment
PhonerSet Audio Assignmen
Clients Restrictions
Signal Processing
Line Labels
Studio Settings
Auto Answer
Intro / Data Privacy Query
Answering Machine
Night Service
DTMF
Actions
GPIO
Ember+ Consumer Extensior
System Settings
General
Line Interface
Caller Line Grouping
VoIP (LAN/SIP)
Audio Interface
PRETALK Streaming
AES67
LAN Interface
VLAN
DHD Audio Matrix
Ember+
PhonerSet / Remote Light
ACconnect
SNMP
Login
Client ID: 9
Studio: 2
AES67
Activate AES67 streaming
LAN Interface:
LAN 1 : 172.20.30.35
PTP Domain:
0
0..127
Quality of Service (DSCP):
PTP:
56 (CS 7)
(0..63)
DiffServ: 224dec
RTP:
46 (EF)
(0..63)
DiffServ: 184dec
Set Default QoS values
Transmission:
Channels:
8
Export SDP File
SAP Stream Name:
AVT-THIPPRO
RTP UDP Port::
5300
Audio Mode:
L24
Sampling Rate:
48 kHz
Address Mode:
Auto
IP Address:
239
1
30
35
Reception:
Update Rx Streams
Stream 1:
AES67_01_8ch; 8 channels; Manually imported
Import SDP File
Stream 2:
MixerA-Stream1; 8 channels
Import SDP File
OK
Cancel
Apply Now

AES67 (1)

- Configure the technical parameters of AES67 audio over IP on the AES67 page.
  - Find the details in the **Audio over IP (AES67-DANTE-RAVENNA-LIVEWIRE)** document available in the download section of our website.

AES67 (2)



LAN Interface (1)

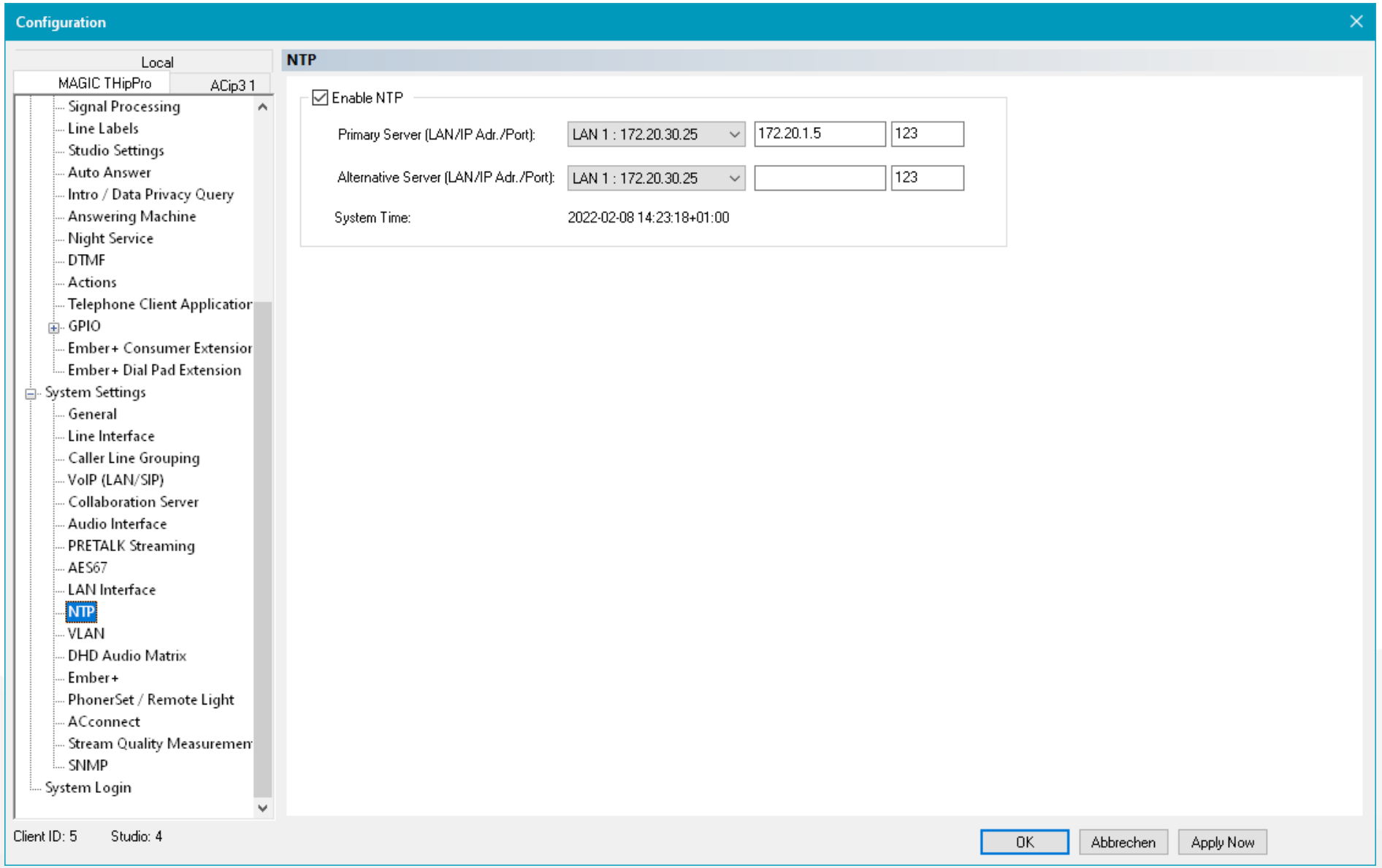
- Configure the basic parameters for connecting to IP networks on the LAN INTERFACE page.
- The MAGIC THipPro Base Board has two Ethernet interfaces.
- The LAN 3/4 module adds two additional Ethernet interfaces.
- There are three IP addresses available for each LAN interface.
  - You must use the PRIMARY IP ADDRESS to connect to a SIP server when using the VoIP (LAN/SIP) line mode.
  - The second and third IP addresses may be used if VLANs (virtual networks) are enabled.
  - Assign a service (Ember+, DHD, SNMP, PC control, ...) to a VLAN on the VLAN configuration page.
  - Assign a service (Ember+, DHD, SNMP, PC control, ...) to an IP address on the corresponding configuration page of the service.
  - PCs may connect to each Ethernet interface and each IP address of the MAGIC THipPro.

- LAN X: Set IP addresses, STUN parameters and Quality of Service classification for each LAN interface.
  - DHCP: Retrieve an IP address automatically from a DHCP server.
  - IP ADDRESS: Enter a unique IP address. Default settings for the primary IP addresses:
    - LAN1: 192.168.96.102
    - LAN2: 192.168.96.103
    - LAN3: 192.168.96.104
    - LAN4: 192.168.96.105
  - SUBNET MASK: Enter the bitmask describing the subnet. Default settings for the primary IP addresses:
    - LAN1-LAN4: 255.255.255.0
  - DEFAULT GATEWAY: Enter the IP address of the router in the local network. Default settings for the primary IP addresses:
    - LAN1-LAN4: 192.168.96.1
  - DNS SERVER: Enter the IP address of a DNS server. Required to resolve host names of SIP servers and STUN servers.

LAN Interface (2)

- STUN SERVER PARAMETERS: Using a STUN server may be mandatory by the VoIP (SIP) provider. Only one STUN server is required per LAN interface even if the LAN interface is used to connect to multiple providers. Enable STUN for each VoIP account individually on the VOIP (LAN/SIP) configuration page.
  - STUN SERVER: Enter the IP address or the host name of the STUN server specified by the VoIP provider.
  - NAT KEEP ALIVE INTERVAL: Set the time interval when the MAGIC THipPro sends periodic Keep-Alive packets to the SIP Server. Thus, routers and firewalls keep the SIP communication ports open. This allows the SIP server to notify the device about incoming calls. Keep-Alive packets are only sent if STUN is enabled for the respective SIP account. (default: 20 seconds)
- QUALITY OF SERVICE:
  - See QoS - Quality of Service on IP level in this document.
- LINK TYPE: Sets the mode for crossover cable detection. (default: auto)
- DISABLE INSUFFICIENT LAN ALARM: Disables the application alarm that occurs when the Ethernet connection does not provide 100 Mbit/s and full duplex operation.
  - 100 Mbit/s / full duplex is required for audio transmission.
- CONTROL: Configure the parameters of PC control connections.
  - UDP CONTROL PORT: Sets the UDP port all PC software instances connect to. (default: 10000)
  - SET DEFAULT PORT: Resets the UDP control port to the default setting.
  - ACCESSIBLE FROM: Select the Ethernet interface and the IP address of MAGIC THipPro, to which the PC access is to be limited.
    - In factory settings PC software clients can access each LAN interface.
    - It is recommended to select a specific interface to prevent unauthorized access.

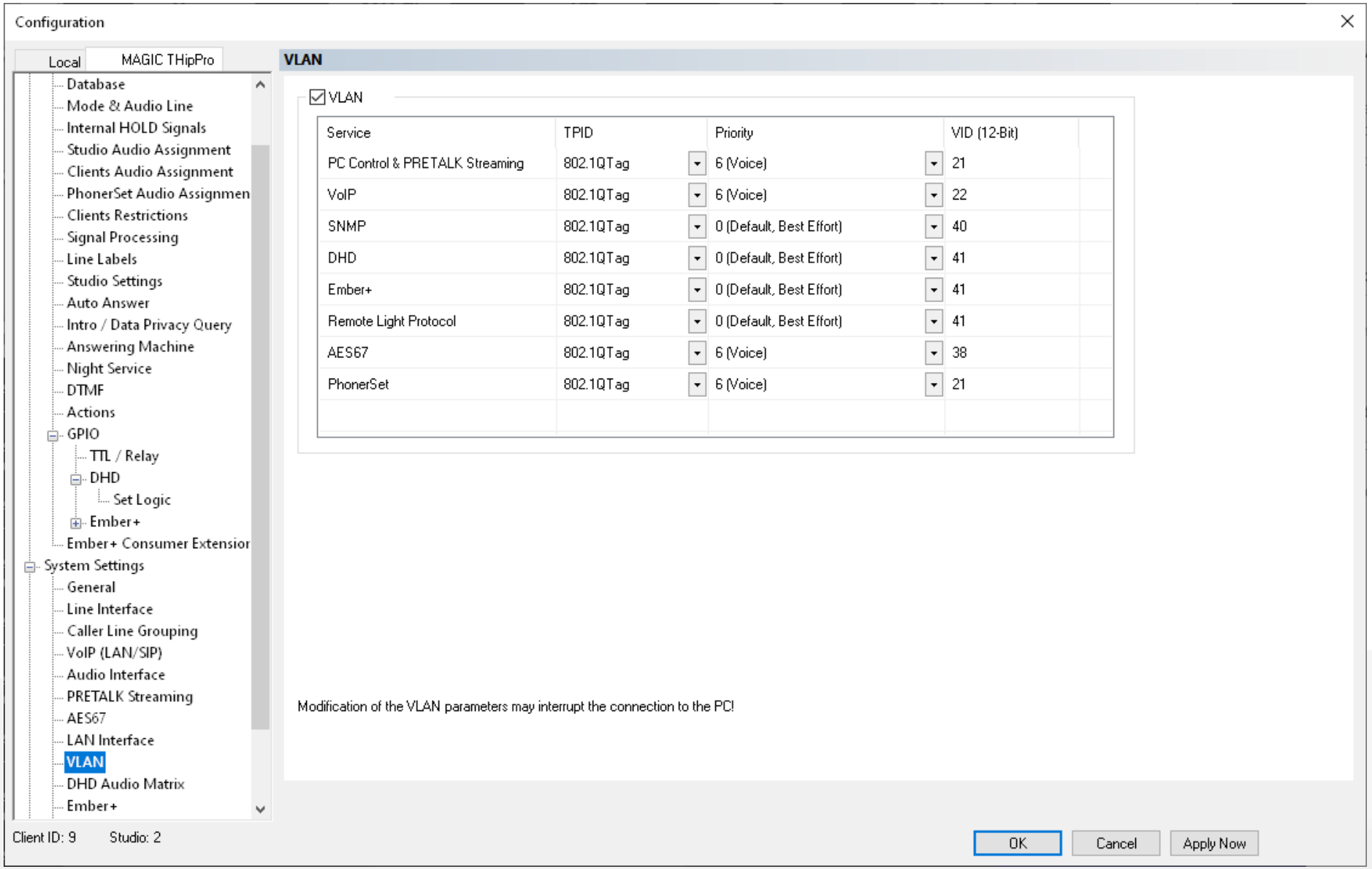
LAN Interface (3)


Configuration
Local
MAGIC THipPro
ACip3 1
Signal Processing
Line Labels
Studio Settings
Auto Answer
Intro / Data Privacy Query
Answering Machine
Night Service
DTMF
Actions
Telephone Client Applicatior
GPIO
Ember+ Consumer Extensior
Ember+ Dial Pad Extension
System Settings
General
Line Interface
Caller Line Grouping
VoIP (LAN/SIP)
Collaboration Server
Audio Interface
PRETALK Streaming
AES67
LAN Interface
NTP
VLAN
DHD Audio Matrix
Ember+
PhonerSet / Remote Light
ACconnect
Stream Quality Measuremer
SNMP
System Login
NTP
Enable NTP
Primary Server (LAN/IP Adr./Port):
LAN 1 : 172.20.30.25
172.20.1.5
123
Alternative Server (LAN/IP Adr./Port):
LAN 1 : 172.20.30.25
123
System Time:
2022-02-08 14:23:18+01:00
Client ID: 5
Studio: 4
OK
Abbrechen
Apply Now

NTP (1)

- Configure the parameters for Network Time Protocol on the NTP configuration page.
- The THipPro can synchronise its system time to coordinated universal time (UTC) via NTP.
- The THipPro always tries to connect to the PRIMARY SERVER. If that server is not available it will try to retrieve the time information from the ALTERNATIVE SERVER.
  - LAN: Select the LAN interface of the THipPro which has access to the NTP server.
  - IP ADDR: Enter the IP address of the NTP server. The THipPro does not resolve host names of NTP servers.
  - PORT: Enter the server port. NTP normally uses the UDP protocol on port 123.
  - SYSTEM TIME: Here the current time of the THipPro is displayed.

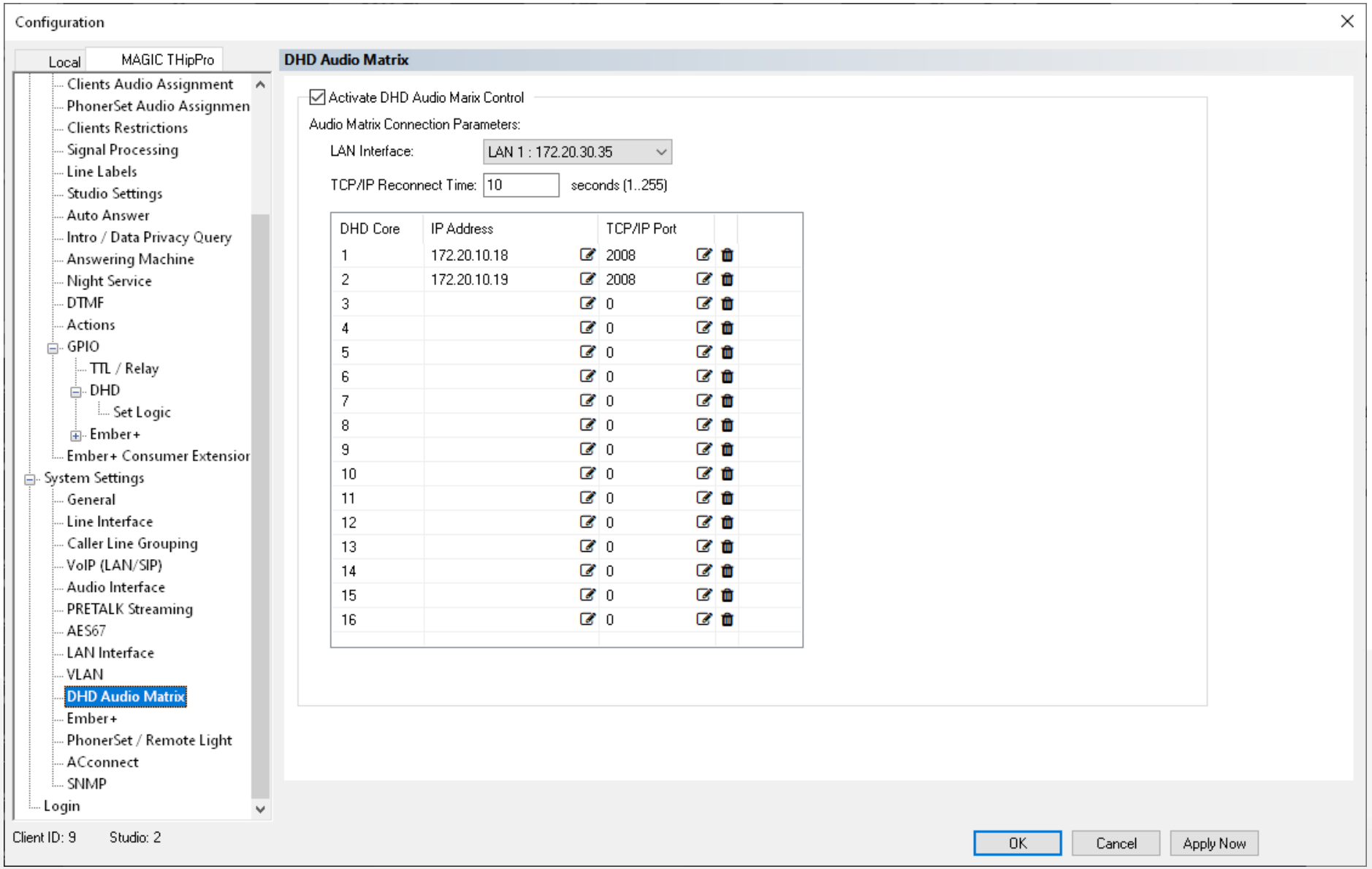
NTP (2)


Configuration
Local
MAGIC THipPro
Database
Mode & Audio Line
Internal HOLD Signals
Studio Audio Assignment
Clients Audio Assignment
PhonerSet Audio Assignmen
Clients Restrictions
Signal Processing
Line Labels
Studio Settings
Auto Answer
Intro / Data Privacy Query
Answering Machine
Night Service
DTMF
Actions
GPIO
TTL / Relay
DHD
Set Logic
Ember+
Ember+ Consumer Extensior
System Settings
General
Line Interface
Caller Line Grouping
VoIP (LAN/SIP)
Audio Interface
PRETALK Streaming
AES67
LAN Interface
VLAN
DHD Audio Matrix
Ember+
Client ID: 9
Studio: 2
VLAN
VLAN
Service
TPID
Priority
VID (12-Bit)
PC Control & PRETALK Streaming
802.1QTag
6 (Voice)
21
VoIP
802.1QTag
6 (Voice)
22
SNMP
802.1QTag
0 (Default, Best Effort)
40
DHD
802.1QTag
0 (Default, Best Effort)
41
Ember+
802.1QTag
0 (Default, Best Effort)
41
Remote Light Protocol
802.1QTag
0 (Default, Best Effort)
41
AES67
802.1QTag
6 (Voice)
38
PhonerSet
802.1QTag
6 (Voice)
21
Modification of the VLAN parameters may interrupt the connection to the PC!
OK
Cancel
Apply Now

VLAN (1)

- Configure the basic parameters for virtual local area networks on the VLAN page.
  - VLAN: Enable or disable virtual networks globally.
    - SERVICE: All services provided by the MAGIC THipPro which support virtual LANs are listed here.
    - TPID: Enable or disable VLAN for the specific service:
      - NONE: The service will not carry a VLAN ID and therefor is not part of a VLAN.
      - 802.1QTag: The service will carry a VLAN ID specified in VID and therefore becomes part of that virtual local area network.
    - PRIORITY: Sets a quality of service classification for the service ranging from 0 = lowest priority to 7 = highest priority. It is recommended to set the priority to 6 for services transmitting audio (Pretalk Streaming, VoIP, AES67 and PhonerSet).
    - VID (12-Bit): Sets the VLAN identifier specifying to which VLAN the service belongs. The range is 1-4094.

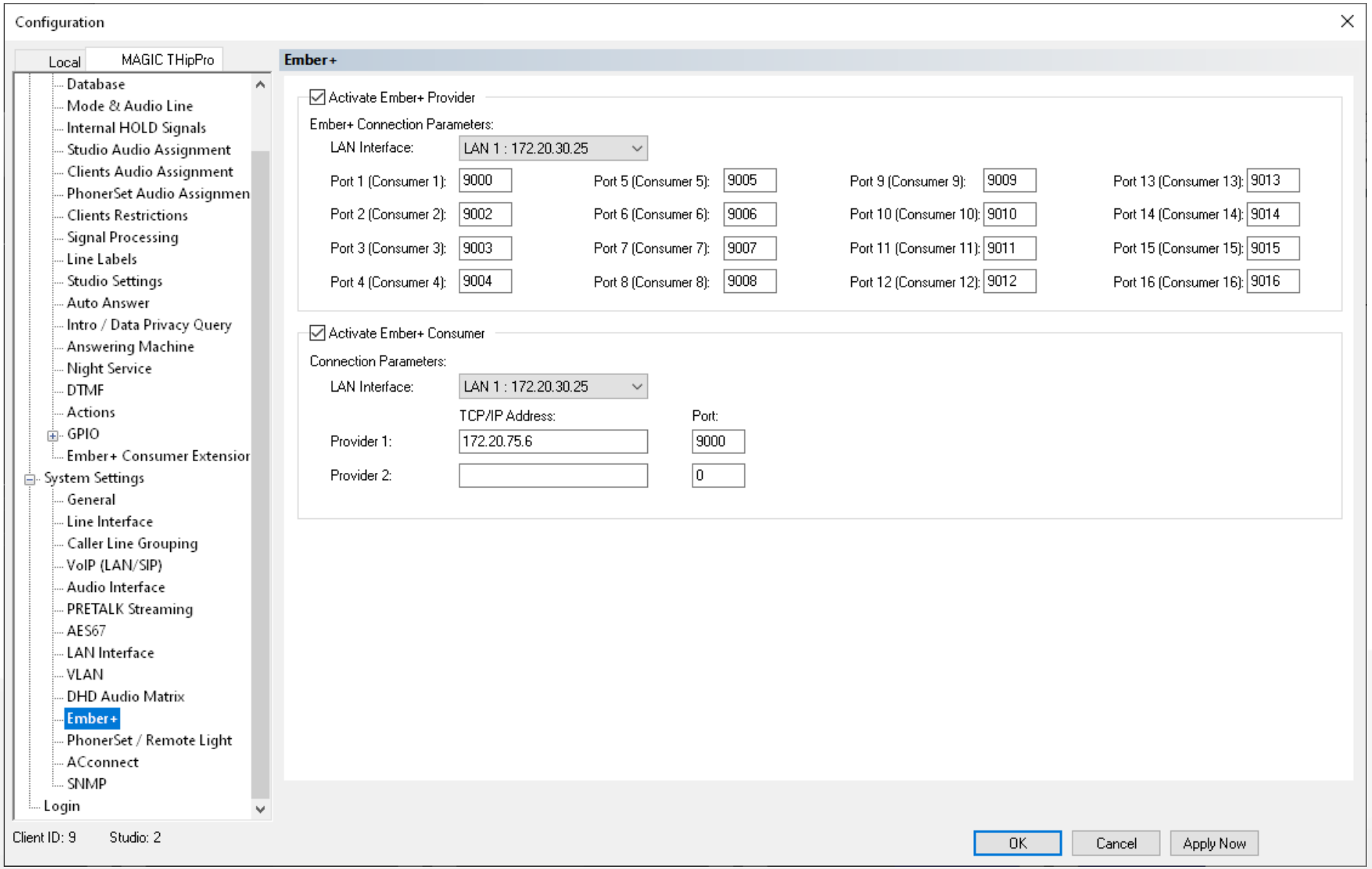
- Note: Changing the VLAN configuration requires to reconfigure the network switches and routers accordingly. If not done correctly the PC software will lose connection the THipPro.
  - VLANs may be enabled or disabled globally on the front display of the THipPro.
- Find further information on VLANs under VLAN – Virtual Networks in this document.



DHD AUDIO MATRIX (1)

- Configure the parameters for connecting the MAGIC THipPro to a DHD core on the DHD AUDIO MATRIX page.
- The MAGIC THipPro supports DHD-ECP (External Control Protocol) to interact with DHD mixing consoles by sending and receiving commands and status information via DHD SetLogic.
- The MAGIC THipPro can connect to up to 16 DHD cores.
- ACTIVATE DHD AUDIO MATRIX CONTROL: Enable the DHD communication protocol.
- LAN INTERFACE: Select the LAN interface of the MAGIC THipPro which connects to the DHD cores.
- TCP/IP RECONNECT TIME: Specifies the time interval between TCP connection requests to a DHD core in seconds. The range is 1 – 255 seconds. (default: 10 seconds)
- DHD CORE: Enter up to 16 DHD cores in the table.
- IP ADDRESS: Enter the IP address of the DHD core.
- TCP/IP PORT: Enter the port of the DHD-ECP (External Control Protocol) of the DHD core.
- Find the details in the Signalling and Control with DHD SetLogic document available in the download section of our website.

DHD AUDIO MATRIX (2)


Configuration
Local
MAGIC THipPro
Database
Mode & Audio Line
Internal HOLD Signals
Studio Audio Assignment
Clients Audio Assignment
PhonerSet Audio Assignmen
Clients Restrictions
Signal Processing
Line Labels
Studio Settings
Auto Answer
Intro / Data Privacy Query
Answering Machine
Night Service
DTMF
Actions
GPIO
Ember+ Consumer Extensior
System Settings
General
Line Interface
Caller Line Grouping
VoIP (LAN/SIP)
Audio Interface
PRETALK Streaming
AES67
LAN Interface
VLAN
DHD Audio Matrix
Ember+
PhonerSet / Remote Light
ACconnect
SNMP
Login
Client ID: 9
Studio: 2
Ember+
Activate Ember+ Provider
Ember+ Connection Parameters:
LAN Interface:
LAN 1 : 172.20.30.25
Port 1 (Consumer 1): 9000
Port 2 (Consumer 2): 9002
Port 3 (Consumer 3): 9003
Port 4 (Consumer 4): 9004
Port 5 (Consumer 5): 9005
Port 6 (Consumer 6): 9006
Port 7 (Consumer 7): 9007
Port 8 (Consumer 8): 9008
Port 9 (Consumer 9): 9009
Port 10 (Consumer 10): 9010
Port 11 (Consumer 11): 9011
Port 12 (Consumer 12): 9012
Port 13 (Consumer 13): 9013
Port 14 (Consumer 14): 9014
Port 15 (Consumer 15): 9015
Port 16 (Consumer 16): 9016
Activate Ember+ Consumer
Connection Parameters:
LAN Interface:
LAN 1 : 172.20.30.25
TCP/IP Address:
Port:
Provider 1:
172.20.75.6
9000
Provider 2:
0
OK
Cancel
Apply Now

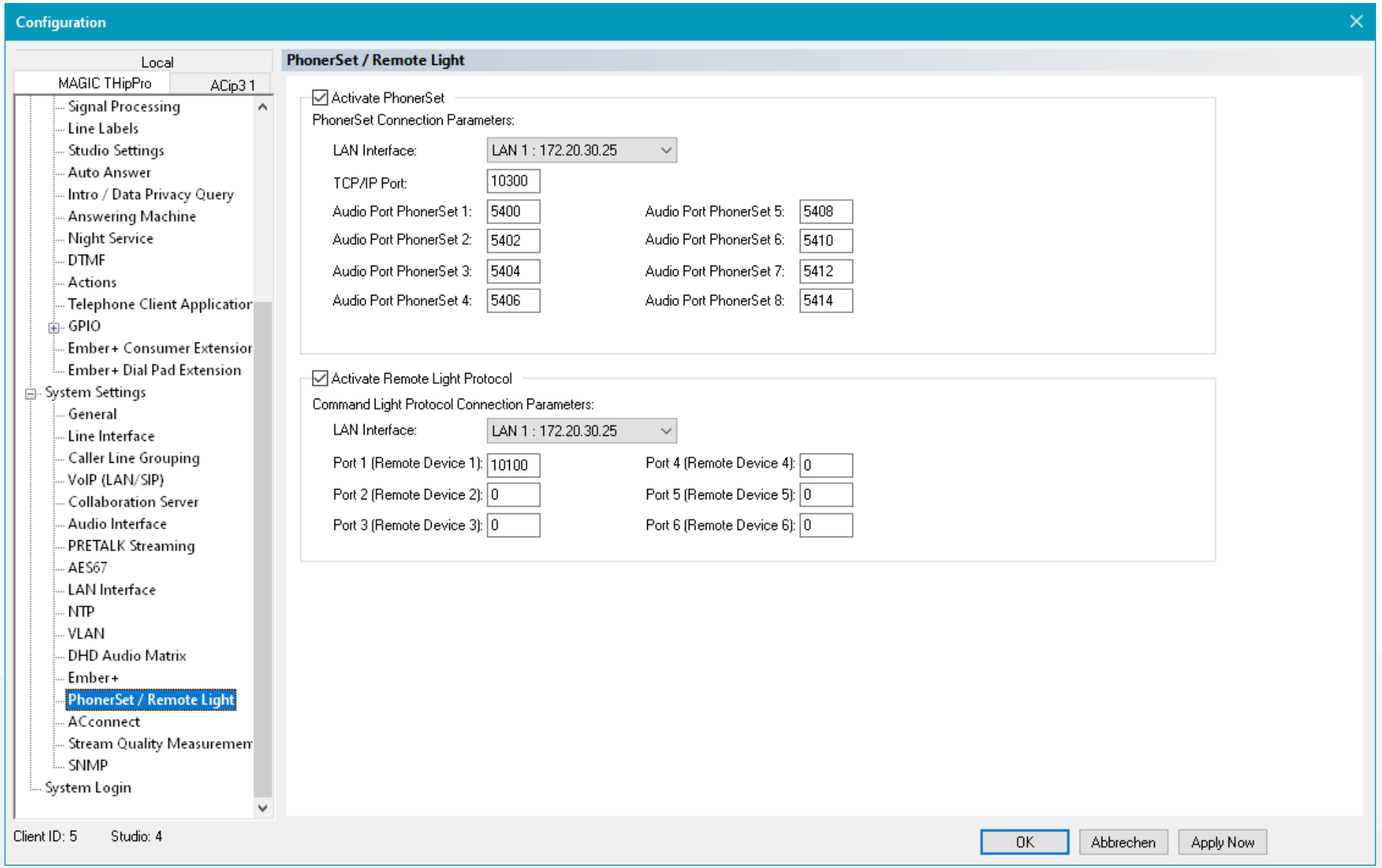
Ember+ (1)

- Configure the parameters for connecting the MAGIC THipPro to studio equipment supporting Ember+ on the EMBER+ page.
- The MAGIC THipPro supports Provider role and Consumer role in an Ember+ communication.
- The Ember+ protocol provides ways to send and receive commands and status information.
- ACTIVATE EMBER+ PROVIDER to let up to 16 Ember+ consumers connect to the MAGIC THipPro.
- LAN INTERFACE: Select the LAN interface of the MAGIC THipPro to which the Ember+ consumers connect.
- PORT N (CONSUMER N): Enter a port for each consumer which should connect to the MAGIC THipPro. (default: 9000, 9001, 9002, ...)
- Find more information in the Signalling and Control with EmBER+ document available in the download section of our website.

- ACTIVATE EMBER+ CONSUMER to connect the MAGIC THipPro to one or two Ember+ providers.
- Enabling the Ember+ consumer is also required for the Ember+ Consumer Extension.
- LAN INTERFACE: Select the LAN interface of the MAGIC THipPro connecting to Ember+ providers.
- TCP/IP ADDRESS: Enter the IP address of the provider.
- PORT: Enter a port for each provider the MAGIC THipPro should connect to. (default: 9000, 9001)

- Find more information in the Signalling and Control with EmBER+ document available in the download section of our website.

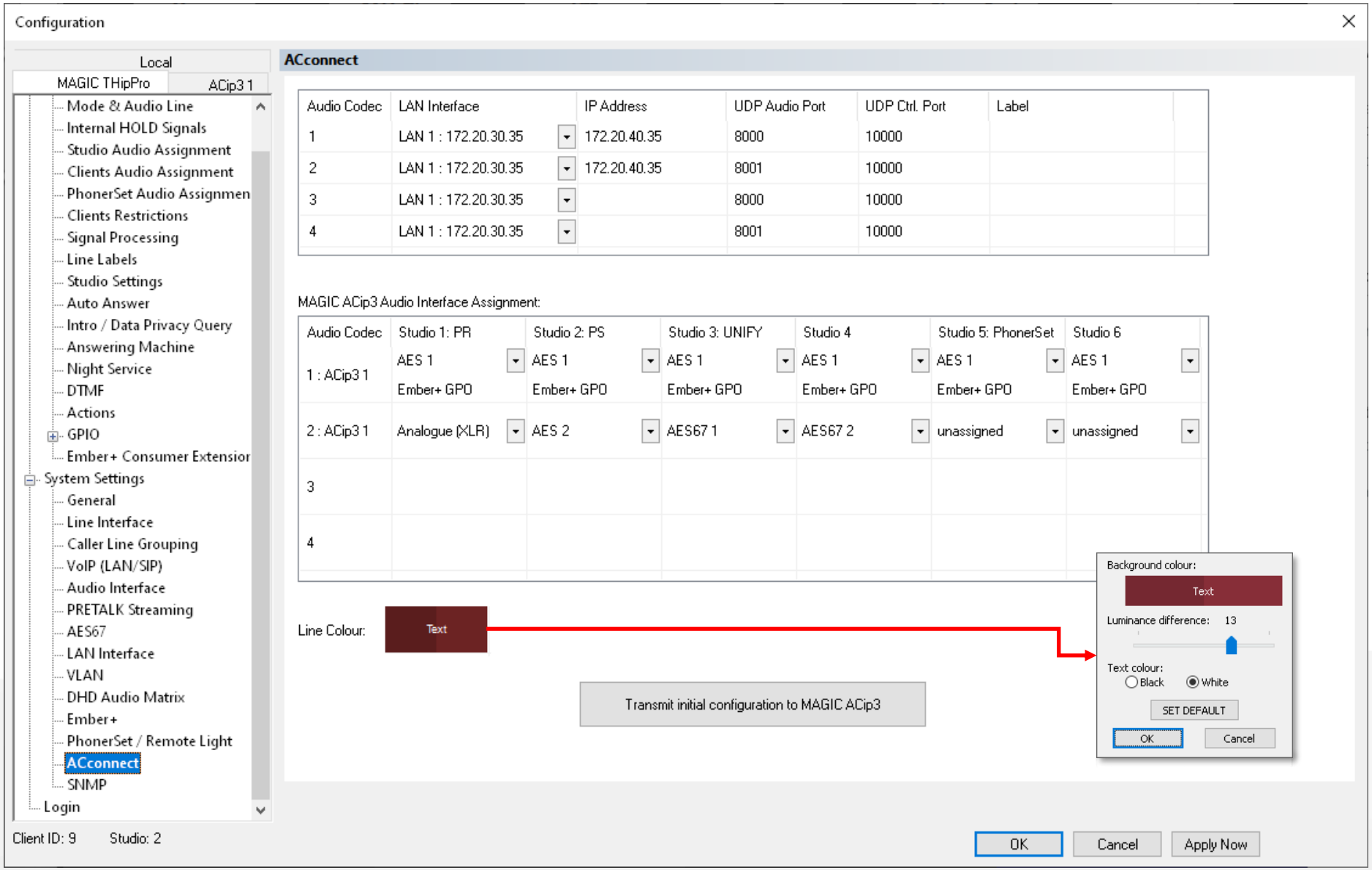
Ember+ (2)



PhonerSet / Remote Light (1)

- Configure the parameters for connecting PhonerSet or Remote Light controllers to the MAGIC THipPro on the PHONERSET / REMOTE LIGHT page.
- ACTIVATE PHONERSET: Enables the PhonerSet module.
  - PhonerSet is an app for touchscreen equipped Grandstream desk phones GXV3350, GXV3370 and GXV3380. Use the phones for pretalk or putting calls in HOLD or ON AIR.
  - The PhonerSet app can control up to 10 MAGIC THipPro telephone lines.
  - Up to 8 PhonerSets may be connected to MAGIC THipPro.
  - LAN INTERFACE: Select the LAN interface of the MAGIC THipPro to which the PhonerSet phones connect.
  - TCP/IP PORT: Enter the local port to which the PhonerSet phones connect. (default: 10300)
  - AUDIO PORT: Each PhonerSet phone establishes an audio data stream to the device for pretalk. Enter a unique port for each PhonerSet phone. (default: 5400, 5402 , 5404 , 5406 , 5408 , 5410, 5412, 5414)
  - Find more information in the MAGIC PhonerSet document available in the download section of our website.
- ACTIVATE REMOTE LIGHT PROTOCOL: Enables the Remote Light protocol module.
  - Remote Light is a very simple IP based protocol to control the telephone lines of a MAGIC THipPro. Contact us for the Remote Light Protocol specification.
  - LAN INTERFACE: Select the LAN interface of the device to which the Remote Light Clients connect.
  - TCP/IP PORT: Enter a local port for each Remote Light Client which should connect to the MAGIC THipPro. (default: 10100, 101001, 10102, …)

PhonerSet / Remote Light (2)


Configuration
Local
MAGIC THipPro
ACip3 1
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Internal HOLD Signals
Studio Audio Assignment
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PhonerSet Audio Assignmen
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LAN Interface
VLAN
DHD Audio Matrix
Ember+
PhonerSet / Remote Light
ACconnect
SNMP
Login
Client ID: 9
Studio: 2
ACconnect
Audio Codec
LAN Interface
IP Address
UDP Audio Port
UDP Ctrl. Port
Label
1
LAN 1 : 172.20.30.35
172.20.40.35
8000
10000
2
LAN 1 : 172.20.30.35
172.20.40.35
8001
10000
3
LAN 1 : 172.20.30.35
8000
10000
4
LAN 1 : 172.20.30.35
8001
10000
MAGIC ACip3 Audio Interface Assignment:
Audio Codec
Studio 1: PR
Studio 2: PS
Studio 3: UNIFY
Studio 4
Studio 5: PhonerSet
Studio 6
1 : ACip3 1
AES 1
Ember+ GPO
2 : ACip3 1
Analogue (XLR)
AES 2
AES67 1
AES67 2
unassigned
3
4
Line Colour:
Text
Transmit initial configuration to MAGIC ACip3
Background colour:
Text
Luminance difference:
13
Text colour:
Black
White
SET DEFAULT
OK
Cancel
OK
Cancel
Apply Now

ACconnect (1)

- Configure the parameters for connecting a MAGIC ACip3 Audio Codec to the MAGIC THipPro on the ACCONNECT page.
  - The ACconnect licence upgrade is required.
  - Connected ACip3 units must be configured using the THipPro PC software. The ACip3 configuration is available through a new tab in the upper left corner of the configuration windows or via MENU – MAGIC ACIP3 – CONFIGURATION in the MAGIC THipPro LAN Client software.
  - ACconnect codec channels are embedded in the main panels of MAGIC THipPro Lan Client and MAGIC THipPro Screener.

- AUDIO CODECS: Enter up to four audio codec channels in the upper table.
  - LAN INTERFACE: Select the LAN interface of the MAGIC THipPro to which the ACip3 connects.
  - IP ADDRESS: Enter the IP address of the ACip3 which provides the codec channel.
  - UDP AUDIO PORT: Sets the UDP port for streaming the audio between MAGIC THipPro and MAGIC ACip3 for Pretalk, Hold signal and Conferencing. The UDP audio port defines the source port (at the MAGIC THipPro) and the remote port (at the MAGIC ACip3.)
  - LABEL: Sets the label of codec line's the ON AIR button in the main panel.

ACconnect (2)

- MAGIC ACIP3 AUDIO INTERFACE ASSIGNMENT: Assign an audio interface of each ACip3 codec channel to the studios which should have access to the codec channels. When an ACconnect coded channel is put ON AIR via PC software, the audio signal is routed through one of the ACip3's native audio interfaces to provide the best audio quality. You may either share an audio interface between many studios or assign an individual audio interface to each studio. Up to 5 audio interfaces are available:
  - ANALOGUE (XLR): Analogue stereo interface.
  - AES1 / AES2: Digital AES/EBU stereo interfaces.
  - AES67 1 / AES67 2: Digital Audio over IP stereo interfaces. (Software licence required.)

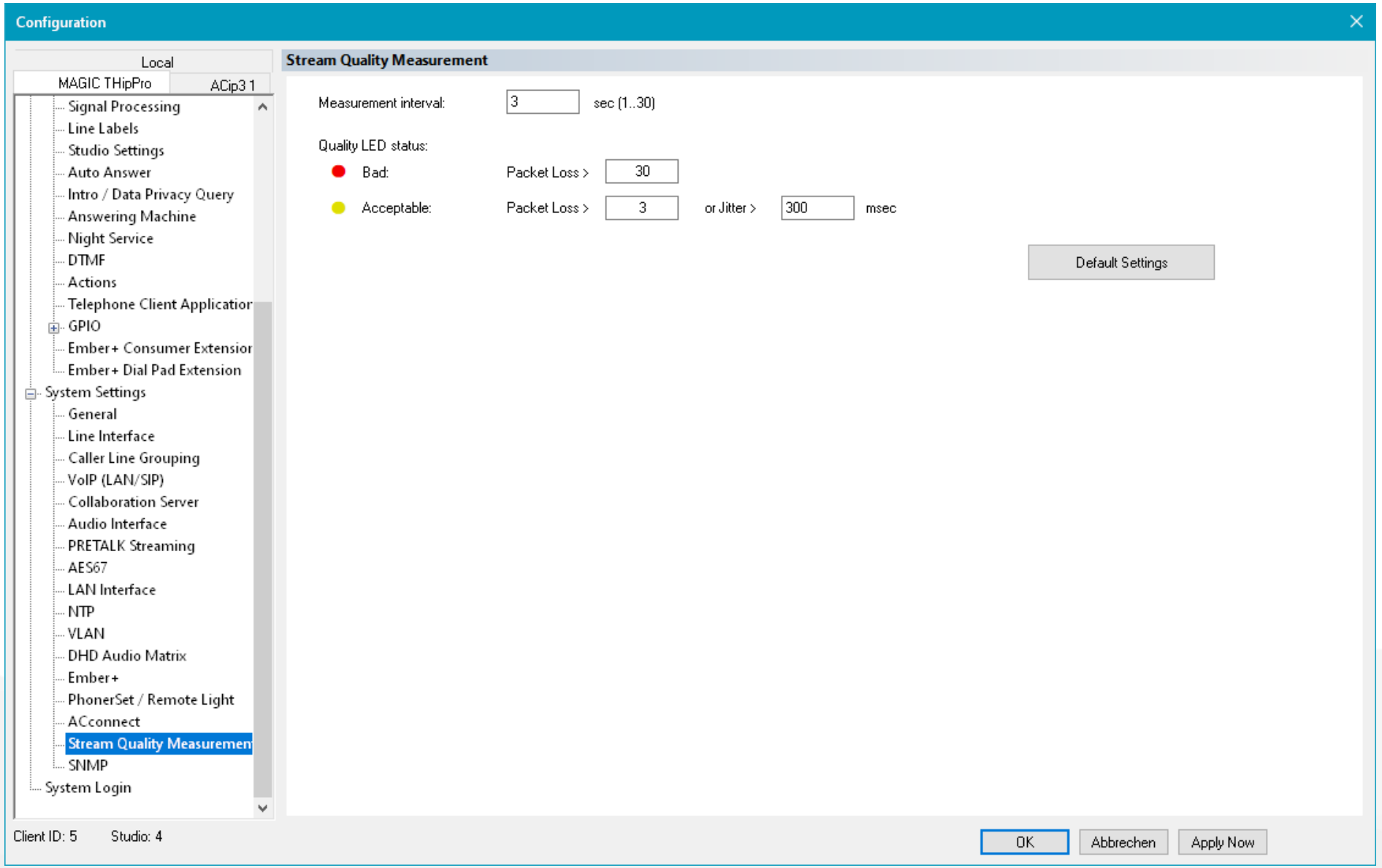
- ACconnect also supports connecting the ACip3's audio interfaces to an audio router, which is controlled via DHD or Ember+. This feature needs to be enabled in the ACip3. The native audio interfaces are then also available with one of the following appendices:
  - + DHD ID: Activating such an audio interface also sends the specified DHD ID to the DHD core.
  - + EMBER+ GPO: Activating such an audio interface also sets an Ember+ GPO in the ACip3 provider's Ember+ tree.
  - + AUDIO MATRIX CONTROL: Activating such an audio interface sends the specified DHD ID and sets an Ember+ GPO.
- Contact us for a quick guide on connecting ACconnect to audio routers.

ACconnect (3)

- LINE COLOUR: Define the colour of the ACconnect channels. Click the coloured rectangle to open the colour configurator:
  - BACKGROUND COLOUR: Click the coloured rectangle to select the background colour of the ACconnect channels.
  - LUMINANCE DIFFERENCE: Side by side channels are easier to identify if they have slightly different colors. This setting changes the brightness of the selected background color of every second ACconnect channel.
  - TEXT COLOUR: Set the colour of all text displayed on the selected background colour to BLACK or WHITE.
  - SET DEFAULT: Set all colours to default values.

- TRANSMIT INITIAL CONFIGURATION TO ACIP3: Press this button when connecting an ACip3 for the first time to the MAGIC THipPro. The THipPro PC software will connect to all specified ACip3 units and configure their ACconnect settings automatically. This can be done manually in the ACip3 configuration as well.

ACconnect (4)

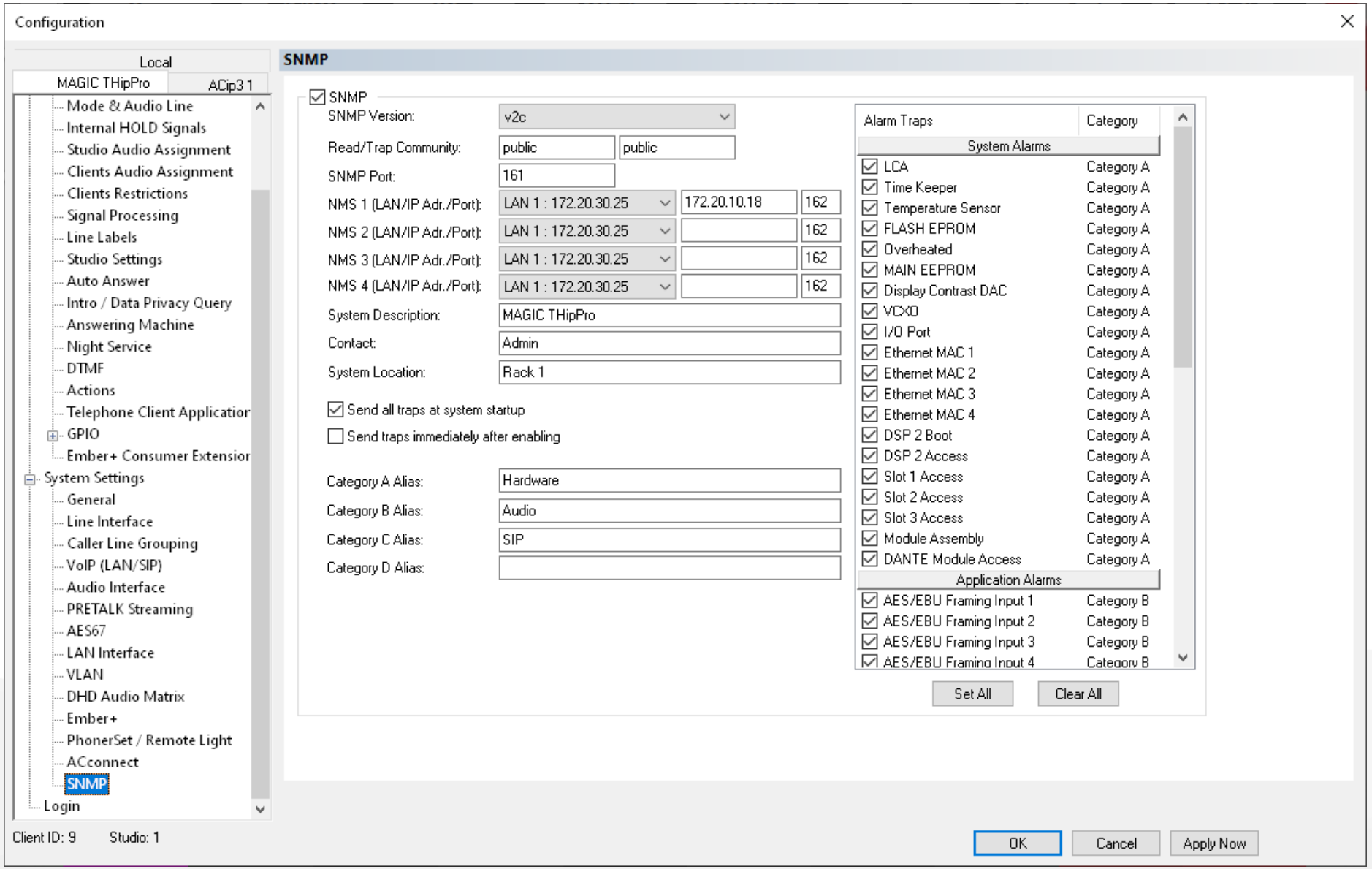


Stream Quality Measurement (1)

- Configure the parameters for the stream quality indication on the PC software on the STREAM QUALITY MEASUREMENT configuration page.
- The stream quality of a received audio stream during a telephone connection is displayed by a little LED near the level meter on the PC software.
  - 🟢: The stream quality is good
  - 🟠: The stream quality is acceptable
  - 🔴: The stream quality is bad
- MEASUREMENT INTERVAL: The THipPro counts the number of lost packet and stores the maximum jitter that appeared within that time interval. The first indication of stream quality after a call is established can be displayed when the first measurement interval is over. A short interval leads to faster results.

- The thresholds for the status LEDs can be configured under QUALITY LED STATUS.
  - PACKET LOSS >: Define the number of packet losses within the measurement interval that will make the LED switch to that particular quality level.
  - JITTER >: Define the maximum jitter within the measurement interval that will make the LED switch to that particular quality level.

Stream Quality Measurement (2)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VLAN
DHD Audio Matrix
Ember+
PhonerSet / Remote Light
ACconnect
SNMP
Login
Client ID: 9
Studio: 1
SNMP
SNMP
SNMP Version:
v2c
Read/Trap Community:
public
public
SNMP Port:
161
NMS 1 (LAN/IP Adr./Port):
LAN 1 : 172.20.30.25
172.20.10.18
162
NMS 2 (LAN/IP Adr./Port):
LAN 1 : 172.20.30.25
162
NMS 3 (LAN/IP Adr./Port):
LAN 1 : 172.20.30.25
162
NMS 4 (LAN/IP Adr./Port):
LAN 1 : 172.20.30.25
162
System Description:
MAGIC THipPro
Contact:
Admin
System Location:
Rack 1
Send all traps at system startup
Send traps immediately after enabling
Category A Alias:
Hardware
Category B Alias:
Audio
Category C Alias:
SIP
Category D Alias:
Alarm Traps
Category
System Alarms
LCA
Category A
Time Keeper
Category A
Temperature Sensor
Category A
FLASH EPROM
Category A
Overheated
Category A
MAIN EEPROM
Category A
Display Contrast DAC
Category A
VCXO
Category A
I/O Port
Category A
Ethernet MAC 1
Category A
Ethernet MAC 2
Category A
Ethernet MAC 3
Category A
Ethernet MAC 4
Category A
DSP 2 Boot
Category A
DSP 2 Access
Category A
Slot 1 Access
Category A
Slot 2 Access
Category A
Slot 3 Access
Category A
Module Assembly
Category A
DANTE Module Access
Category A
Application Alarms
AES/EBU Framing Input 1
Category B
AES/EBU Framing Input 2
Category B
AES/EBU Framing Input 3
Category B
AES/EBU Framing Input 4
Category B
Set All
Clear All
OK
Cancel
Apply Now

SNMP (1)

- Configure the parameters for connecting the MAGIC THipPro to a network management system on the SNMP configuration page. MAGIC THipPro parameters exposed through SNMP are read-only. The MAGIC THipPro responds to Get-requests and sends traps.
- SNMP VERSION: Select the SNMP version. MAGIC THipPro supports SNMPv1 and SNMPv2c.
- READ / TRAP COMMUNITY: Enter a string for the READ community and a string for the TRAP community. Communities are used to authenticate the device with the network management system.
- SNMP PORT: Specify the local UDP port for receiving SNMP requests and sending SNMP responses. The remote port is derived from received SNMP requests. (default: 161)

- NMS 1-4: Specify up to four network management stations to receive traps.
  - LAN:Select the LAN interface of the MAGIC THipPro which is used to send SNMP traps.
  - IP ADDR: Specify the IP address of the network management station.
  - PORT: Specify the UDP port of the Trap receiver of the network management station. (default: 162)
- SYSTEM DESCRIPTION: Enter a string describing this particular MAGIC THipPro. This string is part of the standard MIB.
- CONTACT: Enter a string with information about who is responsible for the MAGIC THipPro. This string is part of the standard MIB.
- SYSTEM LOCATION: Enter a string describing where the MAGIC THipPro is located. This string is part of the standard MIB.

SNMP (2)

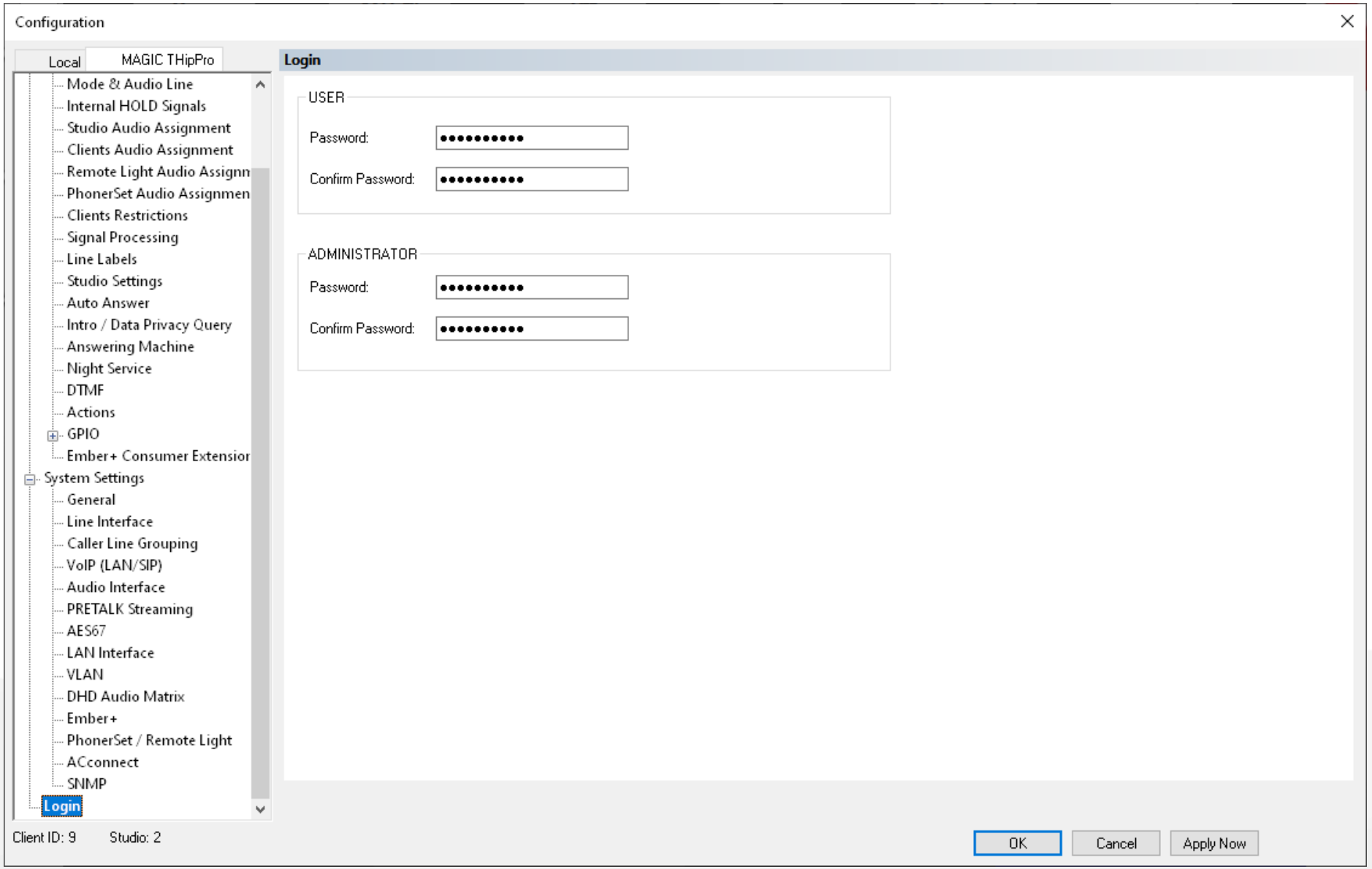
- SEND ALL TRAPS AT SYSTEM STARTUP: Enable this option to send all traps when the MAGIC THipPro finished booting.
- SEND TRAPS IMMEDIATELY AFTER ENABLING: Enable to send a trap immediately after it was enabled in the configuration.
- CATEGORY A-D ALIAS: Each Trap may be assigned to a category. Enter strings to describe the categories. The strings can be read by the network management station.
- ALARM TRAPS: All available traps are listed in this table.
  - Select all traps which should be sent to the network management station.
  - Click into the CATEGORY column to assign a trap to a category.
  - There are four categories. To decrease the number of traps to send, assign several alarms to a category and select only the Category X Trap at the end of the list.
  - Find more information on the alarms in the SYSTEM MONITOR section of this document.
  - Additional Traps:
    - AUTHENTICATION FAILURE: A request used an unknown community string.
    - COLD START: The SNMP agent is reinitialising.
- Note: Find the MIB files in the MIB folder inside the installation directory of the MAGIC THipPro PC software.

SNMP (3)

MAGIC THipPro

Login

info@avt-nbg.de
www.avt-nbg.de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Intro / Data Privacy Query
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Night Service
DTMF
Actions
GPIO
Ember+ Consumer Extensior
System Settings
General
Line Interface
Caller Line Grouping
VoIP (LAN/SIP)
Audio Interface
PRETALK Streaming
AES67
LAN Interface
VLAN
DHD Audio Matrix
Ember+
PhonerSet / Remote Light
ACconnect
SNMP
Login
Client ID: 9
Studio: 2
Login
USER
Password:
Confirm Password:
ADMINISTRATOR
Password:
Confirm Password:
OK
Cancel
Apply Now

Login (1)

- Protect the configuration of the MAGIC THipPro from unauthorized access via passwords. Configure the passwords on the LOGIN configuration page.
- There are two levels of privileges:
  - ADMINISTRATOR: Specify an administrator password to restrict
    - displaying and changing the configuration.
    - importing configurations.
    - managing presets.
    - opening the system panel.
    - accessing the file system.
    - updating the firmware.
    - resetting to factory settings.
  - USER: Specify a user password to restrict loading presets.

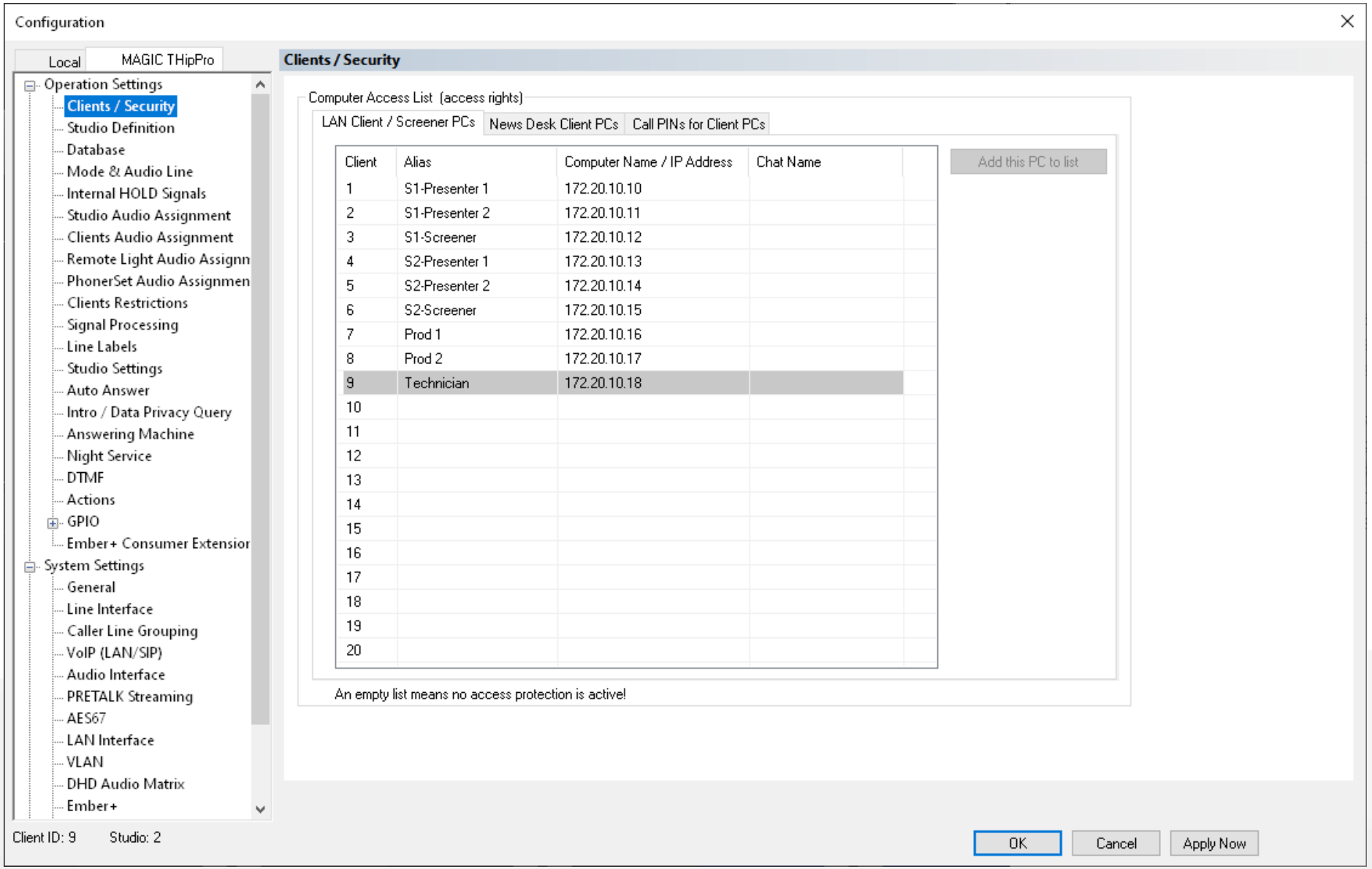
- Note: If you forgot your password, you need to reset the MAGIC THipPro to factory settings.
- Note: The local configuration is protected via Operating System privileges. See SETTINGS LOCATION in the Local Configuration.

Login (2)

MAGIC THipPro

Operation Settings

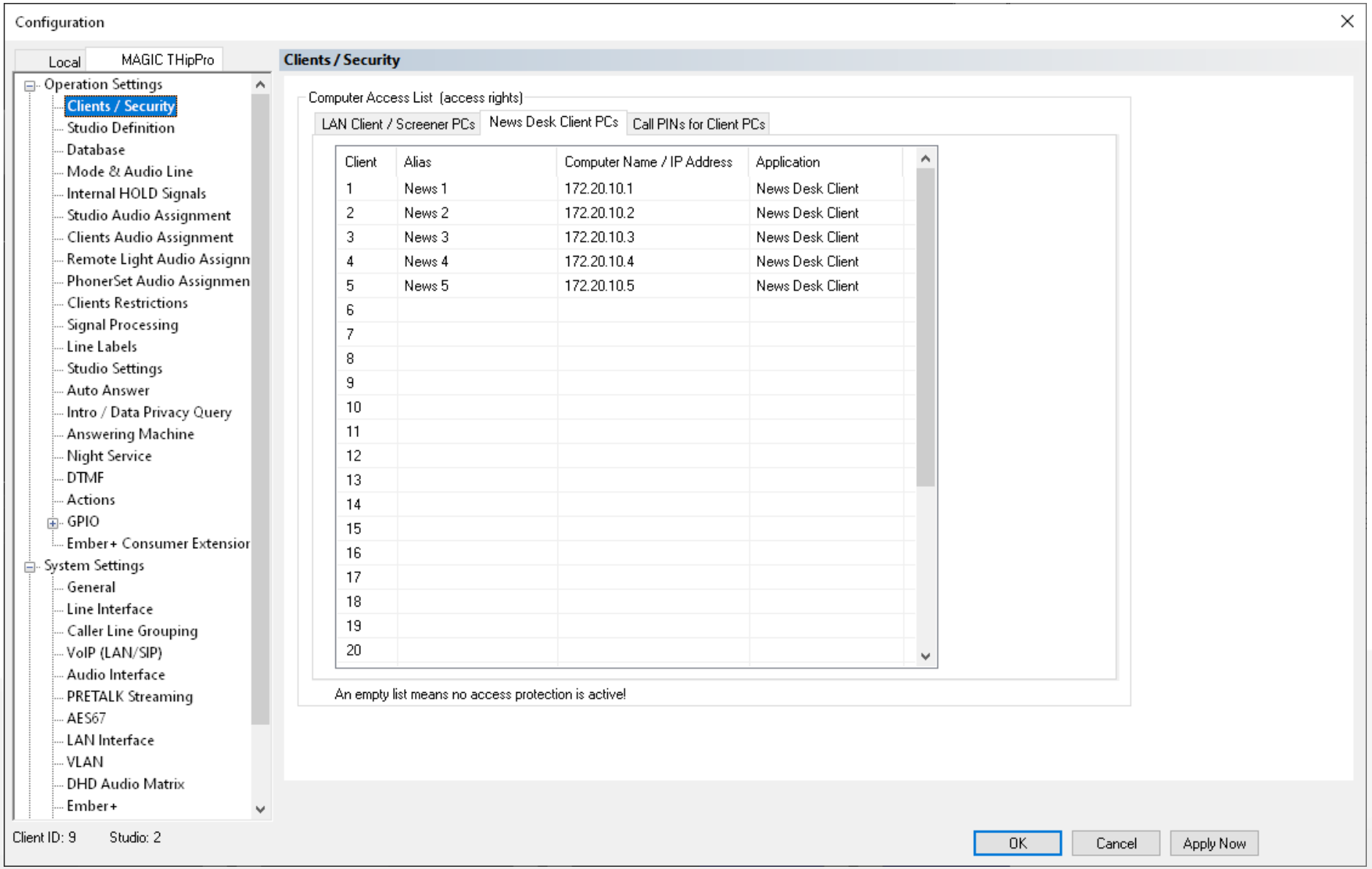
info@avt-nbg.de
www.avt-nbg.de



Clients / Security (1)

- Manage connected PC clients on the CLIENTS / SECURITY page.
- Only Clients specified in one of the lists are permitted to connect to the unit. Other clients are required to enter the administrator login password. If no password is configured on the LOGIN configuration page, access is granted to any PC.
- It is necessary to add the PC clients to one of the lists to be able to assign PRETALK, HOLD and ON AIR audio lines to them.
- Enter all PCs running the MAGIC THipPro LAN Client software or the MAGIC THipPro Screener software on the LAN CLIENT / SCREENER PCS list.
  - CLIENT: The internal ID of a client. It identifies a set of client specific settings like audio lines or access to studios.
  - ALIAS: A label for the client to easily identify the client on other configuration pages with client specific settings or in the system monitor.
  - COMPUTER NAME / IP ADDRESS: A client is identified by the system by its Windows computer name or by its IP address used to access the system.
    If several PCs are to be identified as the same client, you may enter an alias. Enter the same alias in the local settings of the PC software on the respective client PCs:
    - LAN Client / News Desk Client: Go to MENU – CONFIGURATION – SYSTEM – LOCAL – CLIENT SETTINGS – LOCATION. Set CLIENT to TAKE IF FROM LOCAL SETTINGS and enter the alias in COMPUTER NAME ALIAS.
    - Screener Client: Enter the alias under MENU – LOCAL SETTINGS – GENERAL – COMPUTER NAME ALIAS.
  - CHAT NAME: Enter a name which is used in the built-in chat window. If the chat name is empty, the ALIAS is used.
- ADD THIS PC TO LIST: Adds the Windows computer name of the PC currently used for configuration to the list. Only applicable if the PC is not yet in the list.

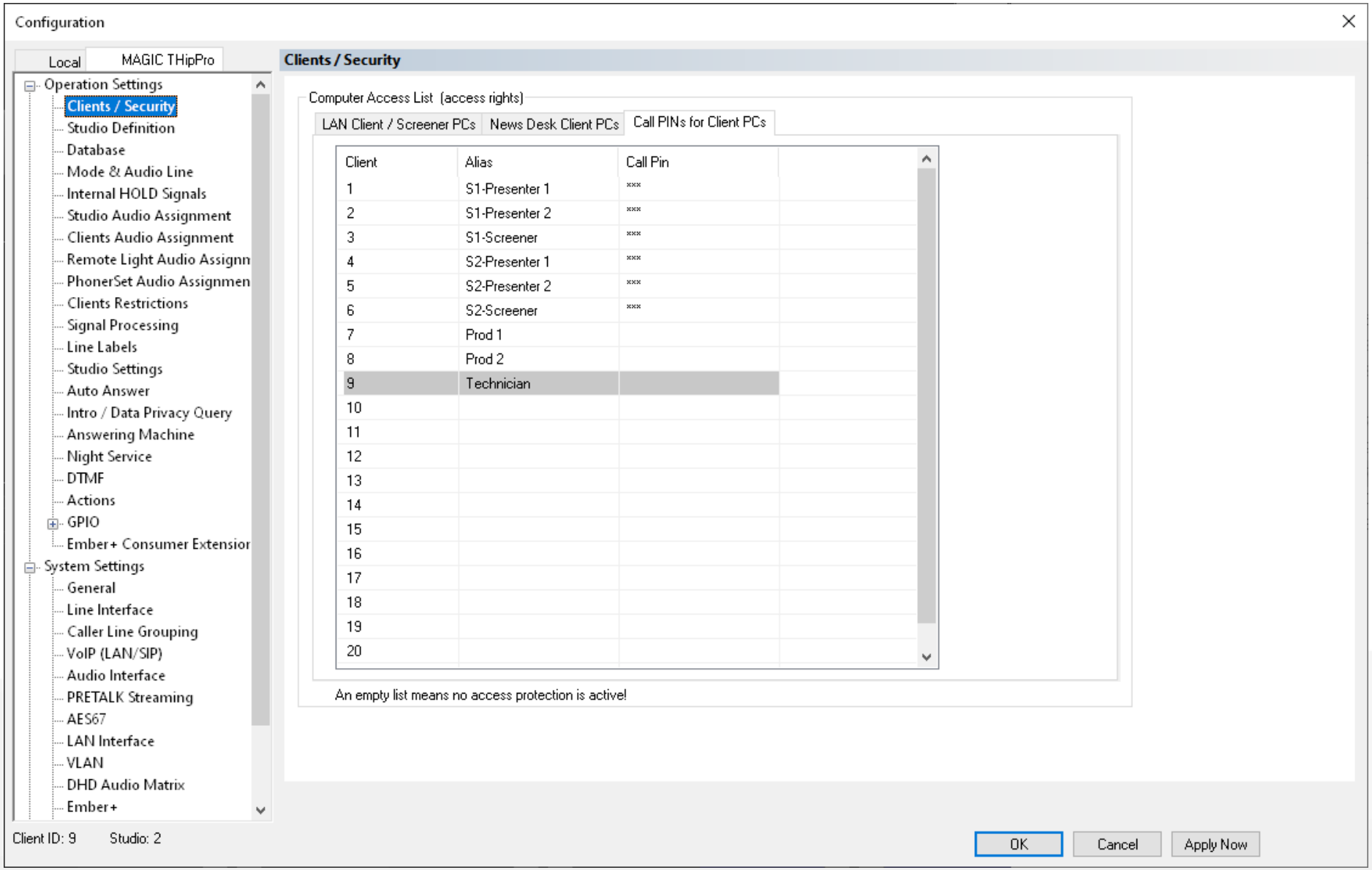
Clients / Security (2)



Clients / Security (3)

- News Desk Clients (NDC) are basically LAN Clients with a limited feature set. NDCs can not configure the system and provide no ON AIR buttons. Install the LAN Client software on NDC PCs. The LAN Client switches to NDC view when connecting to the system.
- Enter all PCs which should act as News Desk Clients in the NEWS DESK CLIENT PCS list.
  - CLIENT: The internal ID of a client. It identifies the client on configuration pages where client specific settings are configured.
  - ALIAS: A label for the client to easily identify the client in the system monitor. Also used as chat name in the built-in chat window.
  - COMPUTER NAME / IP ADDRESS: A client is identified by the system by its Windows computer name or by its IP address used to access the system.
    If several PCs are to be identified as the same client, you may enter an alias. Enter the alias in the LOCAL SETTINGS of the PC software under CLIENT SETTINGS – LOCATION.
  - APPLICATION: Just informative.
- Note: Clients on the NEWS DESK CLIENT PCS list are not permitted to configure the system. If you add the PC currently used for the configuration, you will be locked out of the configuration after pressing OK.

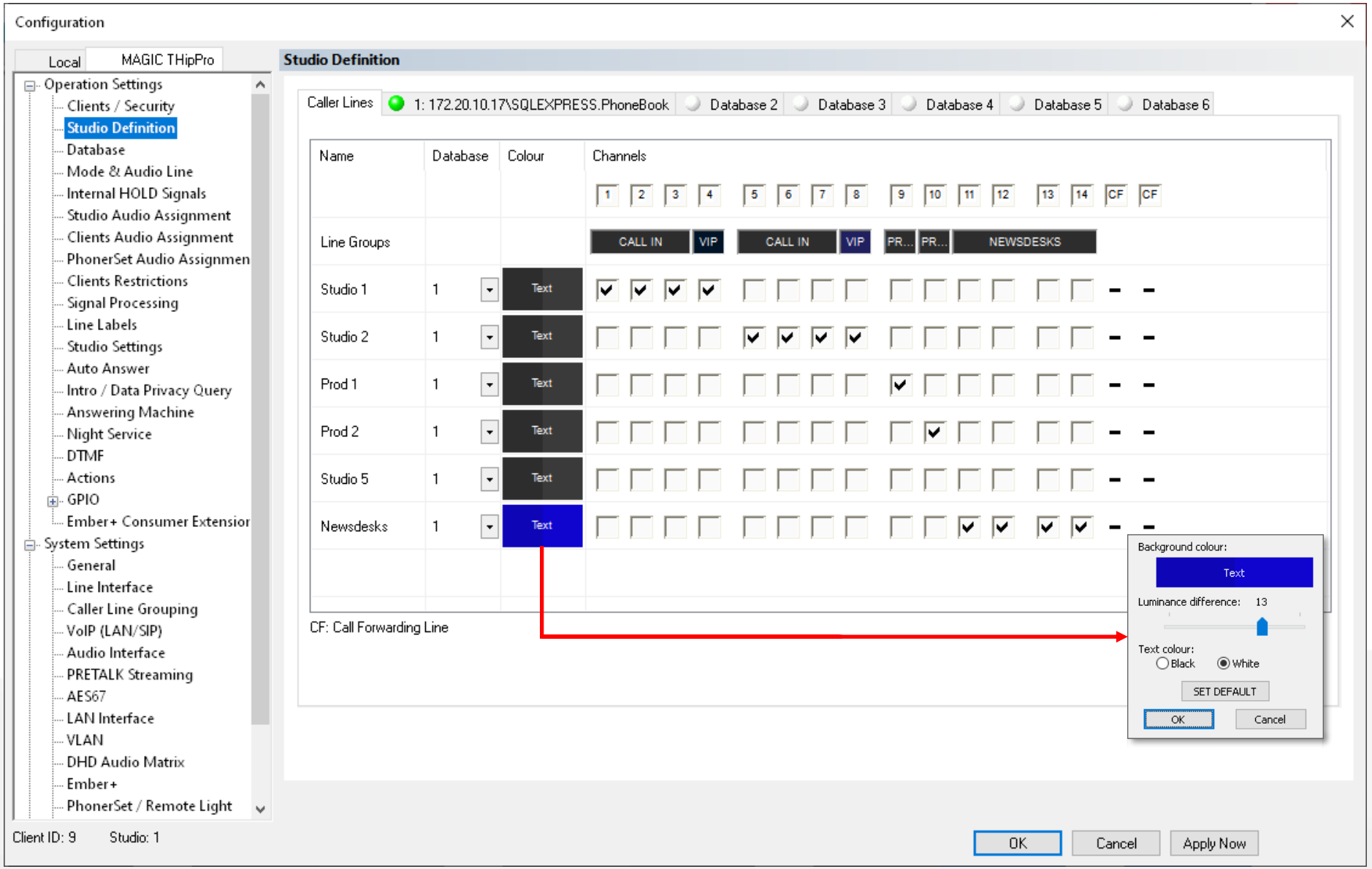
Clients / Security (4)



Clients / Security (5)

- By default, each client is permitted to make long-distance or international calls or calls to cell phone networks.
- Enter a CALL PIN for clients which should be restricted to local calls only.
- On these clients, the users must enter the CALL PIN each time they want to make long distance or international calls or calls to cell phone networks.

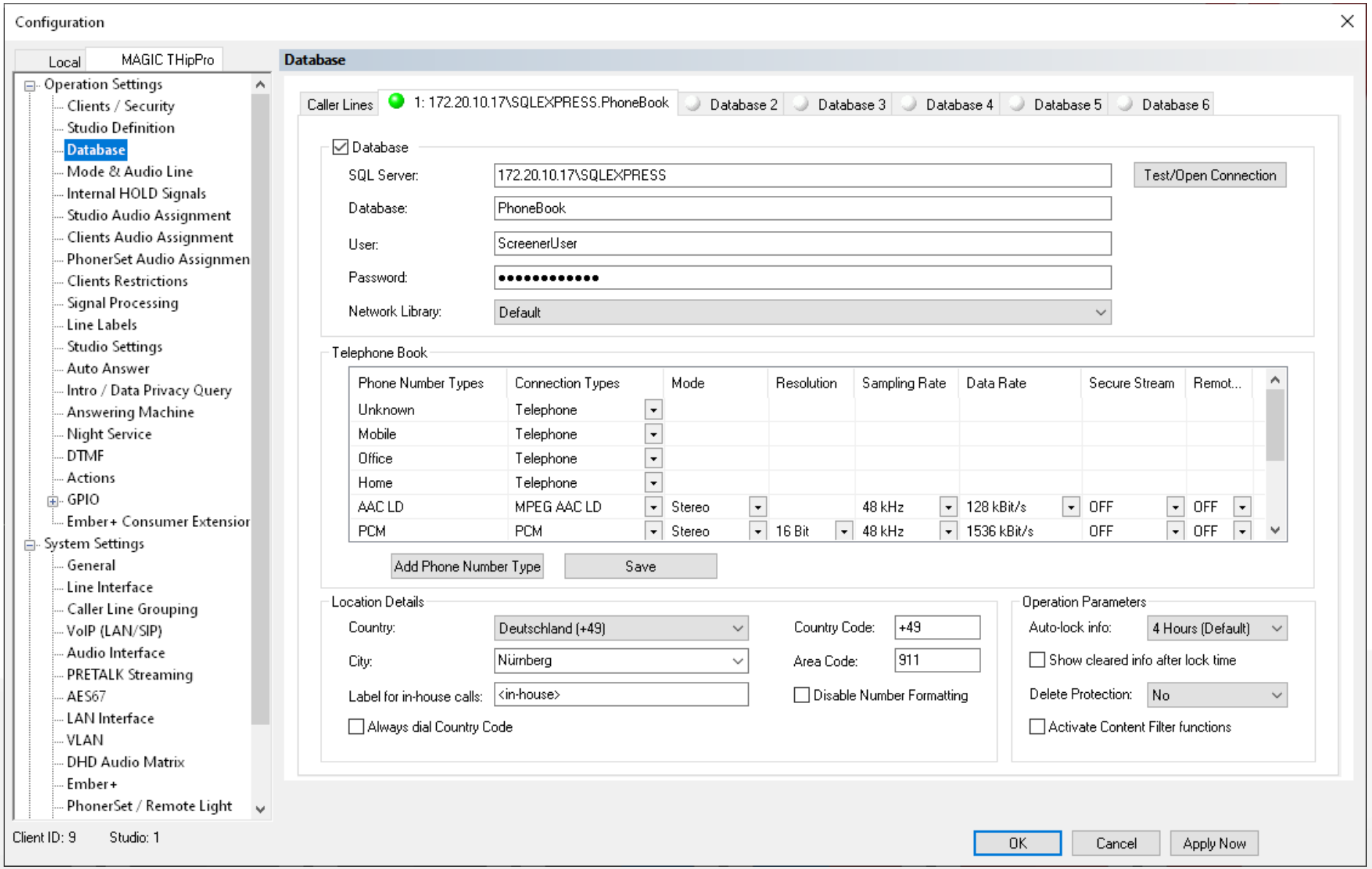
Clients / Security (6)



Studio Definition (1)

- Assign the telephone lines to studios on the CALLER LINES tab of the STUDIO DEFINITION configuration page. Up to six studios for LAN clients and Screener clients can be enabled via the ADMIN STUDIO licences. The News Desk Client licence includes a separate studio for the News Desk Clients. It is always displayed as the last studio in the list. If 6 Admin Studio licences are enabled, LAN Clients and Screener clients can access the News Desk Client studio as well. The number of studios is always limited to 6.
  - NAME: Enter a name for each studio.
  - DATABASE: Select a telephone book database for each studio. Studios which share at least one telephone line must use the same database.
  - COLOUR: Define the colour scheme of the studio. It applies to:
    - the menu bar at the top,
    - the menu side bar and
    - telephones lines which are not assigned to a LINE GROUP.
- Press the coloured rectangle to open the colour configurator:
  - BACKGROUND COLOUR: Click the coloured rectangle to select a background colour.
  - LUMINANCE DIFFERENCE: Side by side channels are easier to identify if they have slightly different colors. This setting changes the brightness of the selected background color for every second channel.
  - TEXT COLOUR: Set the colour of all text displayed on the selected background colour to BLACK or WHITE.
  - SET DEFAULT: Set all colours to default values.
- CHANNELS: Assign each telephone line to as many studios as desired. The configured line groups are displayed at the top for better orientation.
  Call Forwarding lines are marked with “CF”. They cannot be assigned to a studio.

Studio Definition (2)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Answering Machine
Night Service
DTMF
Actions
GPIO
Ember+ Consumer Extensior
System Settings
General
Line Interface
Caller Line Grouping
VoIP (LAN/SIP)
Audio Interface
PRETALK Streaming
AES67
LAN Interface
VLAN
DHD Audio Matrix
Ember+
PhonerSet / Remote Light
Client ID: 9
Studio: 1
Database
Caller Lines
1: 172.20.10.17\SQLEXPRESS.PhoneBook
Database 2
Database 3
Database 4
Database 5
Database 6
Database
SQL Server:
172.20.10.17\SQLEXPRESS
Test/Open Connection
Database:
PhoneBook
User:
ScreenerUser
Password:
Network Library:
Default
Telephone Book
Phone Number Types
Connection Types
Mode
Resolution
Sampling Rate
Data Rate
Secure Stream
Remot...
Unknown
Telephone
Mobile
Telephone
Office
Telephone
Home
Telephone
AAC LD
MPEG AAC LD
Stereo
48 kHz
128 kBit/s
OFF
OFF
PCM
PCM
Stereo
16 Bit
48 kHz
1536 kBit/s
OFF
OFF
Add Phone Number Type
Save
Location Details
Country:
Deutschland (+49)
Country Code:
+49
City:
Nürnberg
Area Code:
911
Label for in-house calls:
<in-house>
Disable Number Formatting
Always dial Country Code
Operation Parameters
Auto-lock info:
4 Hours (Default)
Show cleared info after lock time
Delete Protection:
No
Activate Content Filter functions
OK
Cancel
Apply Now

Database (1)

- Configure to up to six databases on the DATABASE page.
- THipPro uses Microsoft SQL or Microsoft SQL Express databases to store caller information (phone book) as well as additional information like layouts for MAGIC THipPro Screener, Social Media content (Twitter) and Show Profiles.
- Assign a database to a studio on the STUDIO DEFINITION configuration page.
- Find the SQL SERVER 2012 INSTALLATION document in the download section of our website. It describes:
  - How to install the Microsoft SQL Express server.
  - How to configure the Microsoft SQL server.
  - How to install the MAGIC THipPro phone book database on a Microsoft SQL server.
  - The manual also applies to newer versions of the Microsoft SQL server.

- DATABASE: Enable the database and specify the parameters to access the database.
  - SQL SERVER: Network address of the Microsoft SQL server followed by the database instance separated by a backslash '\'). Depending on the SQL server configuration the database instance might be omitted.
  - DATABASE: The SQL database name.
  - USER: The SQL database user name.
  - PASSWORD: The users SQL database password.
  - NETWORK LIBRARY: Chose a network library which uses a protocol which is supported by the specified SQL server:
    - DEFAULT: The driver on the Client PC choses the network library automatically.
    - NAMED PIPES
    - TCP/IP
  - TEST/OPEN CONNECTION: Establish a connection to the SQL server. If the connection fails, additional information about the error is displayed.

Database (2)

- TELEPHONE BOOK
  - The MAGIC THipPro phone book stores up to three phone numbers per contact. Phone number types help to classify the phone numbers.
  - All Algorithms which are to be used with ACconnect codec channels must be specified as phone number types.
  - Four phone number types are available by default:
    - Unknown
    - Mobile
    - Office
    - Home
  - PHONE NUMBER TYPES:
    Click on a phone number type to edit the name.
    Erase the name to delete the phone number type.
    Default phone number types cannot be deleted.
  - ADD PHONE NUMBER TYPE: Click to add a phone number type to the list. Edit the parameters directly in the list.
  - SAVE: Press to save the changes in the database.

- CONNECTION TYPES: Chose a connection type:
  - TELEPHONE: For telephone numbers used on THipPro channels.
  - COLLABORATION SERVER: For Microsoft Teams contacts.
  - ALL OTHERS: ACconnect algorithms depending on the licenced algorithms of the connected ACip3 including G.711, G.722, MP2, MP3, aptX, AAC, Opus, PCM.
- MODE: Mono or stereo mode for certain algorithms.
- RESOLUTION: 16/20/24 bits/sample for certain algorithms.
- SAMPLING RATE: 32/48 kHz for certain algorithms.
- DATA RATE: 16…384 kBit/s for certain algorithms.

Database (3)

- SECURE STREAM: Secure streaming is only possible between AVT codecs. The audio streams is sent twice with an optional delay between the streams to improve error tolerance. The second stream uses the audio port of the first stream increased by one.
  - ON: The ACip3 sends a duplicate of the stream additionally. The ACip3 also expects to receive two streams.
  - OFF: Compatible with any AoIP codec.
  - AUTO: The ACip3 sends the Stream twice. If no second stream is received within 10 seconds, sending the second stream is stopped.
  - DELAY: Specify the delay between the two streams (0 – 500 ms). This also increases the overall audio delay.
- REMOTE GPIO: Only possible between AVT codecs. Transmits GPIO input states of TTL, DHD Set Logic, Ember+ to the other end. There, these input states may be assigned to any TTL, DHD Set Logic or Ember+ GPIO output.
  - OFF: Compatible with any AOIP codec.
  - RTP: Send the GPIO input states along with the audio stream.

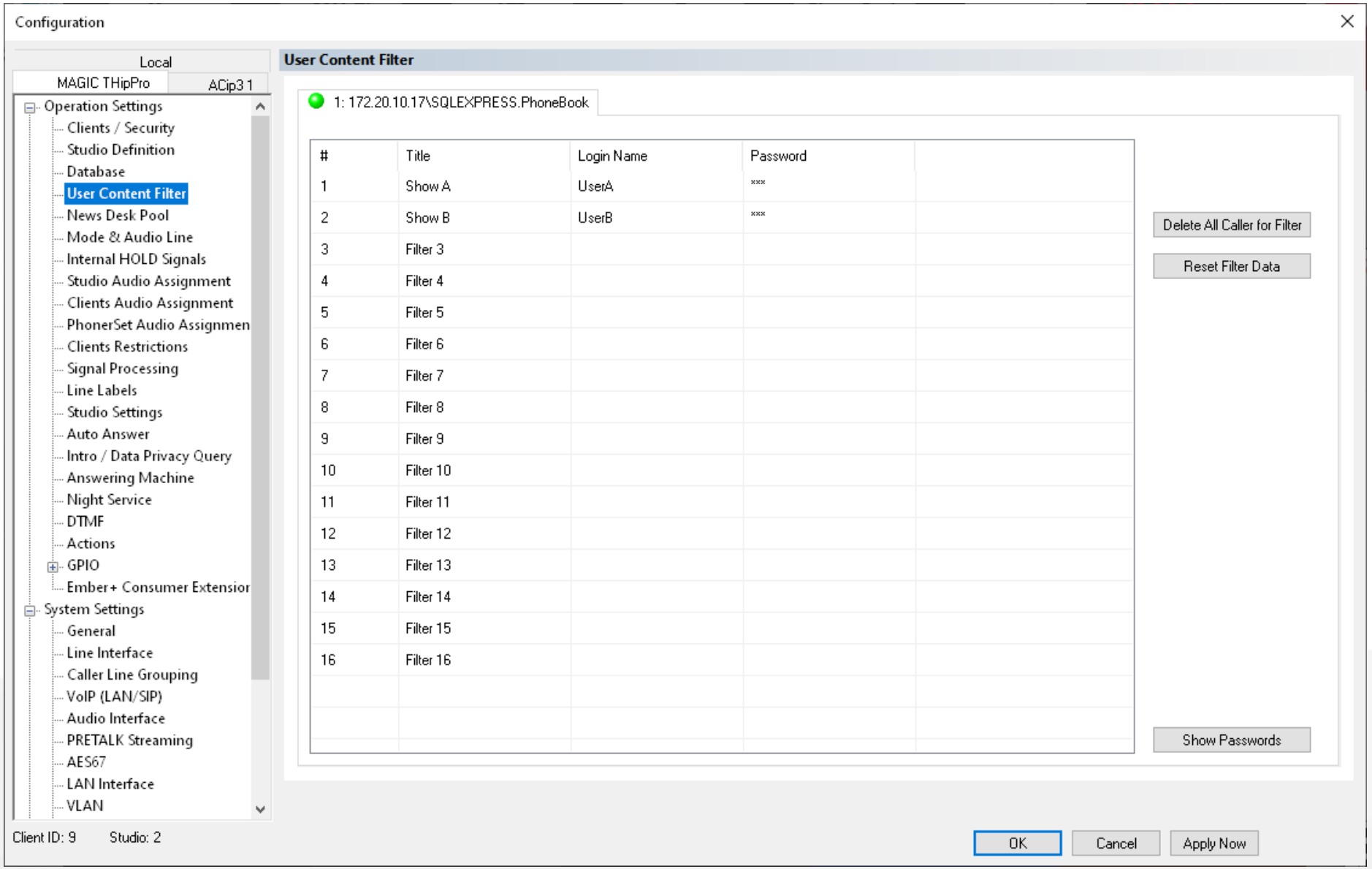
- LOCATION DETAILS: With these parameters the MAGIC THipPro can distinguish between local, long-distance and international calls. They are also necessary to store the telephone numbers in a standardized format.
  - COUNTRY: Select the country in which the MAGIC THipPro is located, from the list. This automatically sets the COUNTRY CODE. If the desired country cannot be found, set the country code manually.
  - COUNTRY CODE: The international dialling code of the country in which the MAGIC THipPro is located.
  - CITY: Select the city in which the MAGIC THipPro is located from the list. This automatically sets the AREA CODE. If the desired city cannot be found, set the area code manually. Using the MAGIC THipPro Screener, it is possible to import area codes into the database. Find the area codes of some countries in the installation directory of MAGIC THipPro Screener.
  - AREA CODE: National telephone number prefix for the city in which the MAGIC THipPro is located.

Database (4)

- LABEL FOR INHOUSE CALLS: This label is displayed instead of the caller's city when a call is identified as coming from an internal extension.
- DISABLE NUMBER FORMATTING: Enable to store and display telephone numbers of incoming calls as they are signaled by the telephone network.
- ALWAYS DIAL COUNTRY CODE: Enable to prefix the country code also for national calls.

- OPERATION PARAMETERS: Manage access to database content.
  - AUTO-LOCK INFO: Information about each call may be stored by the user in the info record. Set the timeout when the system locks the info record after the last editing. If an info record is locked, the screener must use a new info record for entering call information. The locked dataset remains in the database to display the history of the caller. As long a caller is on the noted callers list, the info record is not locked.
  - SHOW CLEARED INFO AFTER LOCK TIME: Enable to automatically create a new record when the current info record was locked by the AUTO-LOCK.
  - DELETE PROTECTION: Set the time period during which a contact cannot be deleted from the database after it has been last edited.
  - ACTIVATE USER CONTENT FILTER: By default, each client PC is permitted to access the phone book. If the user content filter is active, each user must log in with username and password to access the phone book. Each user only has access to the phone book entries he or she has created. The entries created by other users cannot be accessed. Specify usernames and passwords on the USER CONTENT FILTER configuration page.

Database (5)

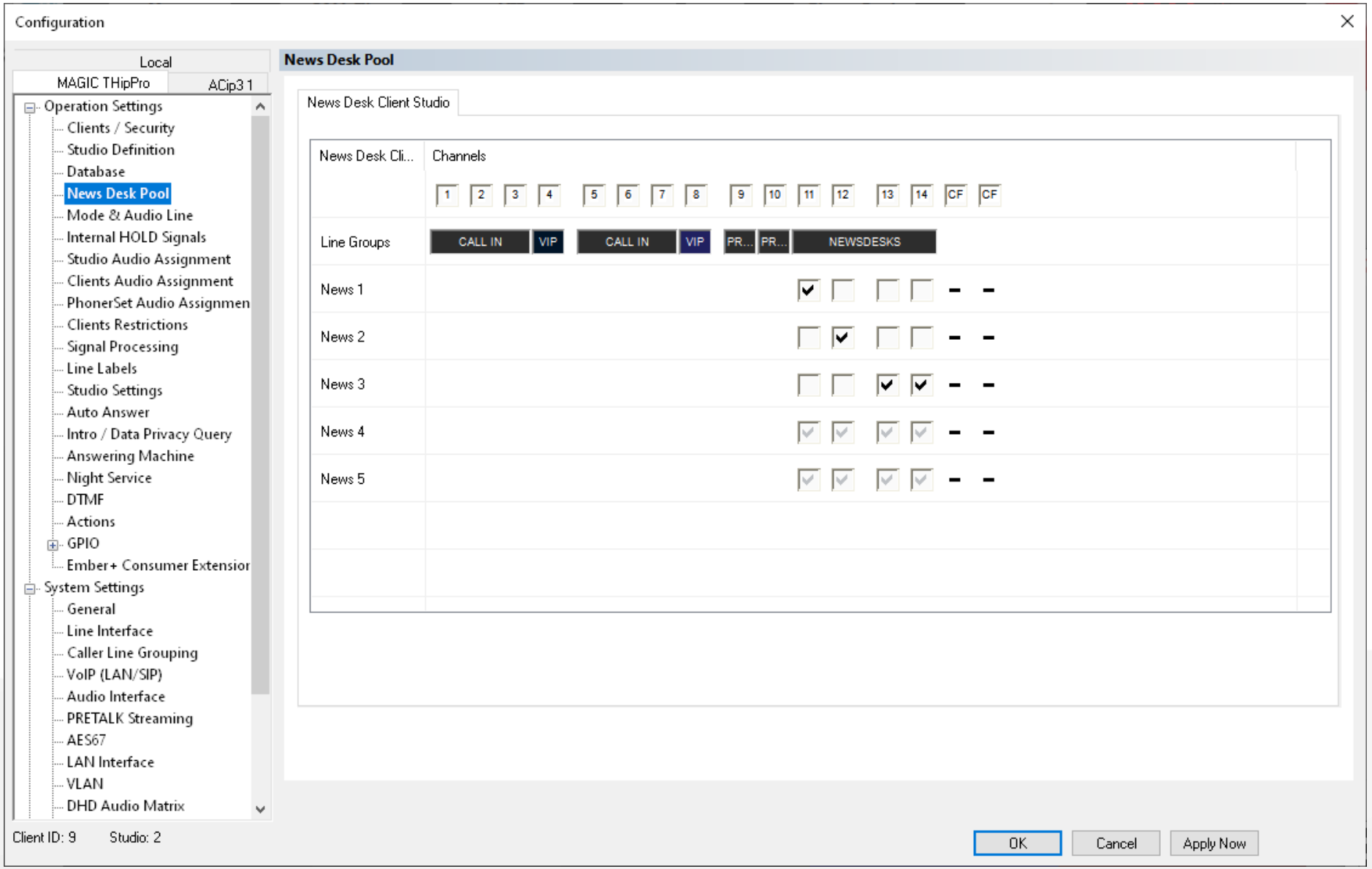


User Content Filter (1)

- Specify usernames and passwords for the User Content Filter of each database on the USER CONTENT FILTER page.
- Activate the User Content Filter in the OPERATION PARAMETERS section off the DATABASE configuration page.
- By default, each client PC is permitted to access the phone book. If the user content filter is active, each user must log in with username and password to access the phone book.
- Each user only has access to the phone book entries he or she has created. The entries created by other users cannot be accessed.
- The User Content Filter credentials cannot be stored in a Preset.
- You may specify a custom image for each user on the STUDIO SETTINGS configuration page which is displayed on the upper right corner of the PC software if a user is logged in.

- When recording PRETALK streams, the software stores the files in a separate subfolder for each content filter (1-16).
- TITLE: Specify the label of the Login. It is used:
  - when notifying the user that he or she has successfully logged in.
  - when specifying the custom image file path in the STUDIO SETTINGS configuration page.
- LOGIN NAME: Specify the username.
- PASSWORD: Specify the password.
- DELETE ALL CALLER FOR FILTER: Delete all phone book entries of the currently selected user.
- RESET FILTER DATA: Resets the whole list to its default values. (Software must be run as administrator).
- SHOW PASSWORDS: Display the configured passwords as plain text. (Software must be run as administrator)

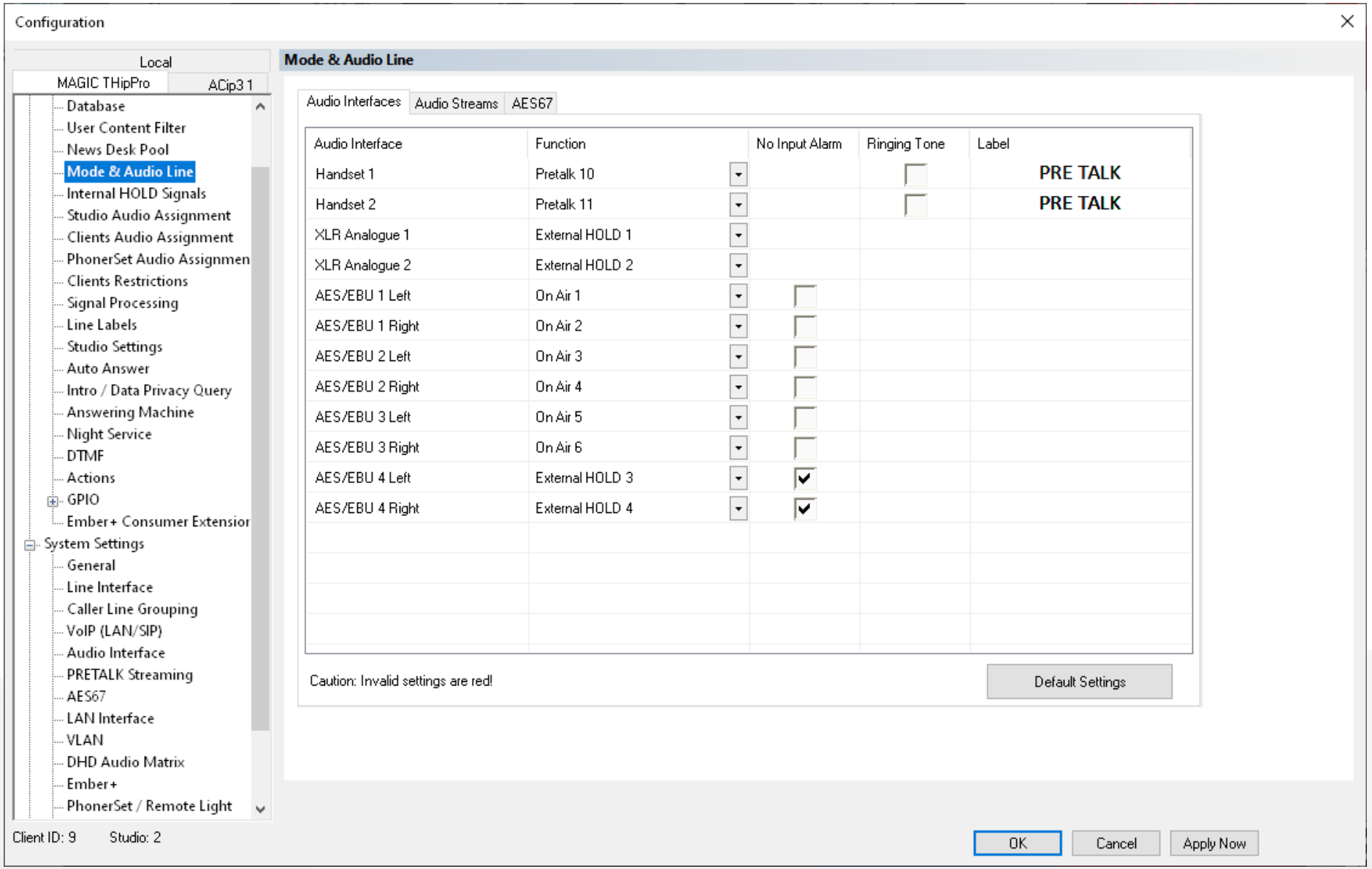
User Content Filter (2)



News Desk Pool (1)

- Assign individual telephone lines to News Desk Clients on the NEWS DESK POOL page.
- By default, each News Desk Client displays all telephone lines assigned to the News Desk Studio.
- Select the checkboxes to display only distinct channels on the respective news desk client.

News Desk Pool (2)



Mode & Audio Line (1)

- Assign logic audio lines to physical and IP-based audio interfaces on the MODE & AUDIO LINE page.
- With MAGIC THipPro, the audio interfaces are not directly assigned to certain functions. Instead, they are assigned to so called audio lines. These audio lines are then assigned to studios or clients.
- This allows for shifting a function to a different audio interface more easily.
- It is also possible to assign multiple audio interfaces to an audio line.
  - The input signals of these audio interfaces are then mixed.
  - The output signal is sent to each audio interface.
- Each audio interface is a mono channel.
- Input and output of an audio interface cannot be separated.

- The table shows 5 columns:
  - AUDIO INTERFACE: Identifies the audio interface.
  - FUNCTION: Click to select an audio line.
  - NO INPUT ALARM: Select this option to disable the input alarm of an AES/EBU digital audio interface when it is used as an output only.
  - RINGING TONE: An audio interface assigned to a Pretalk audio line will output a ringing tone if this option is enabled.
  - LABEL: Click to change the label of the respective button in the MAGIC THipPro LAN Client PC software. Font and font size can also be configured.

Mode & Audio Line (2)

- The available audio interfaces are grouped into up to four categories:
  - AUDIO INTERFACES: Contains the physical audio interfaces (handsets, analogue interfaces, digital AES/EBU interfaces). If there less than five Pretalk Streaming licences installed the respective streams are also displayed here.
  - AUDIO STREAMS: Contains the pretalk streams if there are five or more Pretalk Streaming licences installed on the MAGIC THipPro.
  - AES67: Contains AES67 channels if the AES67 licence is installed and AES67 is activated under SYSTEM SETTINGS – AES67.
    - Note: This is a software implementation of AES67 running on the main DSP.
  - DANTE: Contains the Dante channels if the Dante hardware module is installed on the MAGIC THipPro.
    - Note: Dante is not available when AES67 is activated under SYSTEM SETTINGS – AES67.
    - The Dante module is compatible to AES67.
  - RAVENNA: Contains the RAVENNA channels if the Ravenna hardware module is installed on the MAGIC THipPro.
    - Note: Ravenna is not available when AES67 is activated under SYSTEM SETTINGS – AES67.
    - The Ravenna module is compatible to AES67.

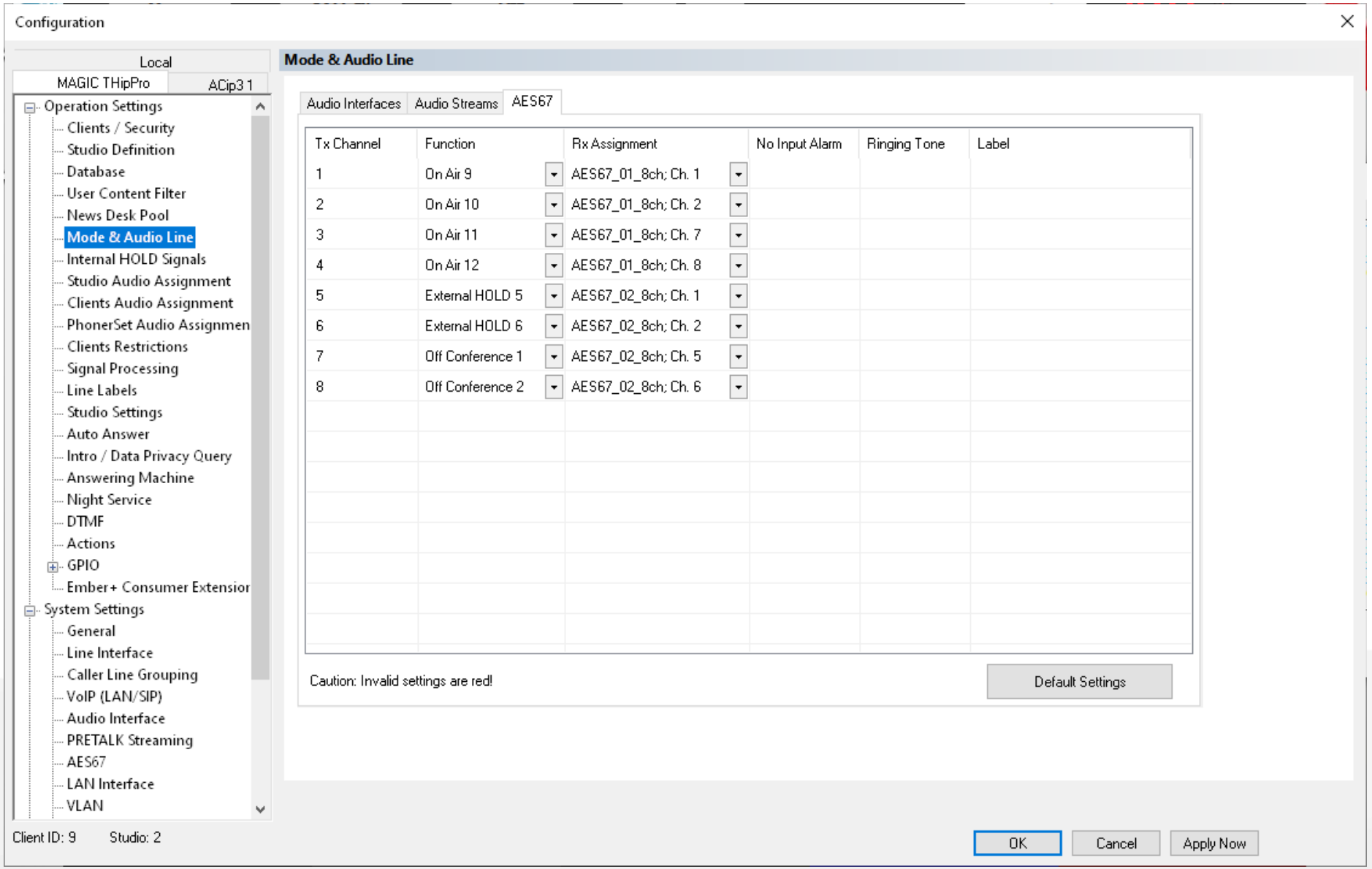
Mode & Audio Line (3)

- Physical audio interfaces as well as AES67 and Dante and Ravenna audio channels can be assigned to the following audio lines:
  - PRETALK 1-20: Assign one of 20 pretalk audio lines. (The full capacity is only available with a DANTE or a Ravenna module). Pretalk audio lines can only be assigned to individual clients. They are used to talk to callers off air.
  - External HOLD 1-6: Assign one of 6 HOLD audio lines. Hold audio lines can be assigned to studios or clients. They provide the audio signal fed to the caller when the call is put in hold.
  - ON AIR 1-28: Assign one of 28 on air audio lines. (The full capacity is only available with a DANTE or a Ravenna module). On air audio lines can be assigned to studios or clients. They are used to connect the unit to the faders of the mixing console.
  - OFF CONFERENCE 1-6: Assign one of 6 off conference audio lines. They can be assigned to studio faders. Use off conference audio lines to provide an off-air audio conference between callers.
  - PHONERSET MONITOR 1-8: Assign one of 8 PhonerSet monitor audio lines. They output the audio signal of the caller of the respective PhonerSet. This can be used to record the caller externally.
  - NOT USED: The audio interface will not be available in the further configuration.

Mode & Audio Line (4)

- Audio streams can only be used to transfer audio between the MAGIC THipPro and the LAN Client or Screener Client PC software. They can be assigned to the following audio lines:
  - PRETALK 1-20: Assign one of 20 pretalk audio lines. (The full capacity is only available with a DANTE or a Ravenna module). Pretalk audio lines can only be assigned to individual clients. They are used to talk to callers off air.
  - DYNAMIC PRETALK: Assign any number of audio streams to the pool of dynamic pretalk audio lines. These audio lines can be assigned to PC clients only. Whenever a client puts a call in Pretalk it requests a stream from the pool. If all audio lines of the pool are in use, the Pretalk button in the PC software is deactivated.
  - NOT USED: The audio interface will not be available in the further configuration.

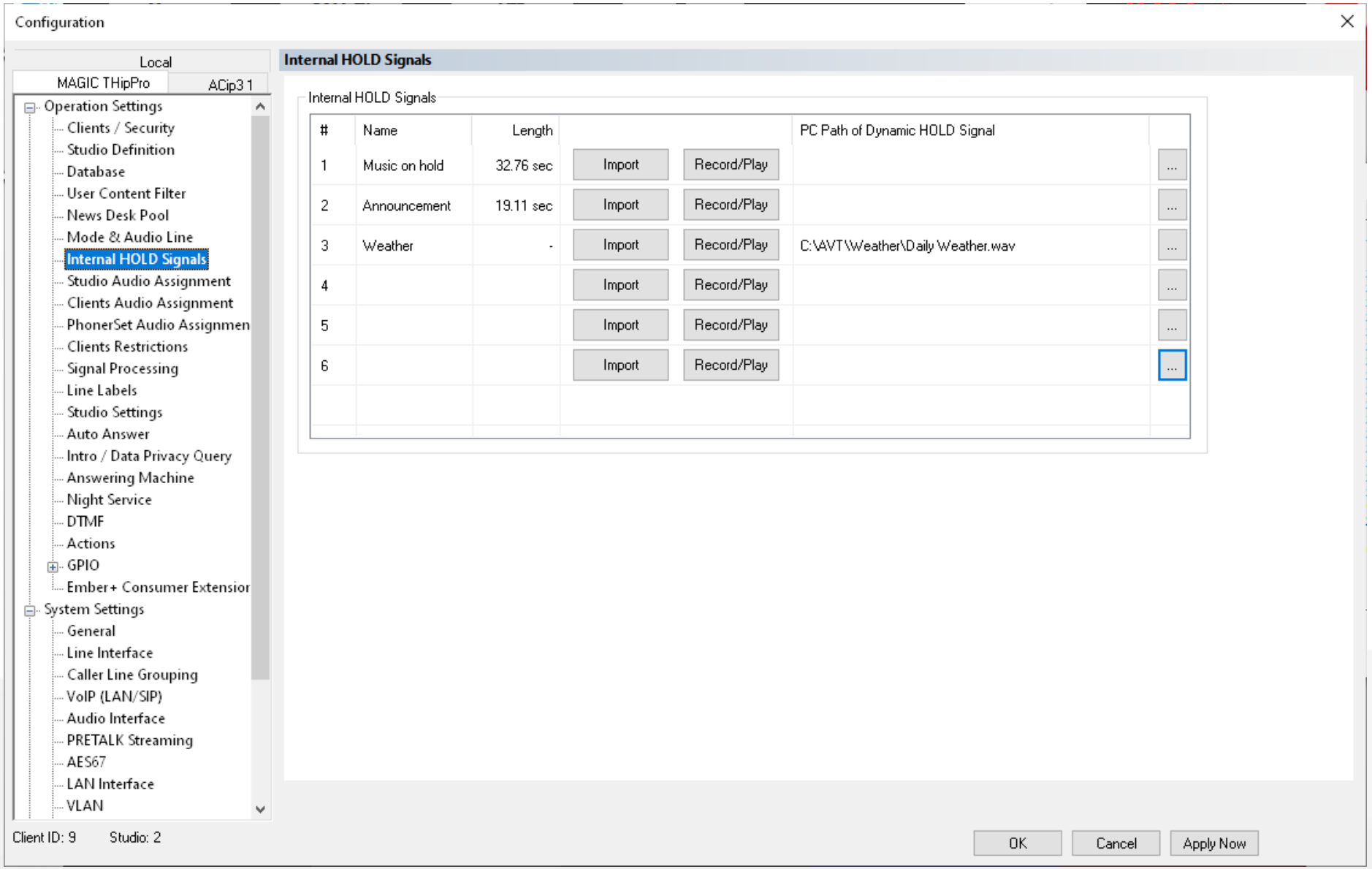
Mode & Audio Line (5)



Mode & Audio Line (5)

- On the AES67 tab, also assign the audio channels of the received AES67 streams to the Functions (= audio lines).
- This is because the MAGIC THipPro only sends one AES67 stream with up to eight channels but it can receive two AES67 streams with up to 16 channels.

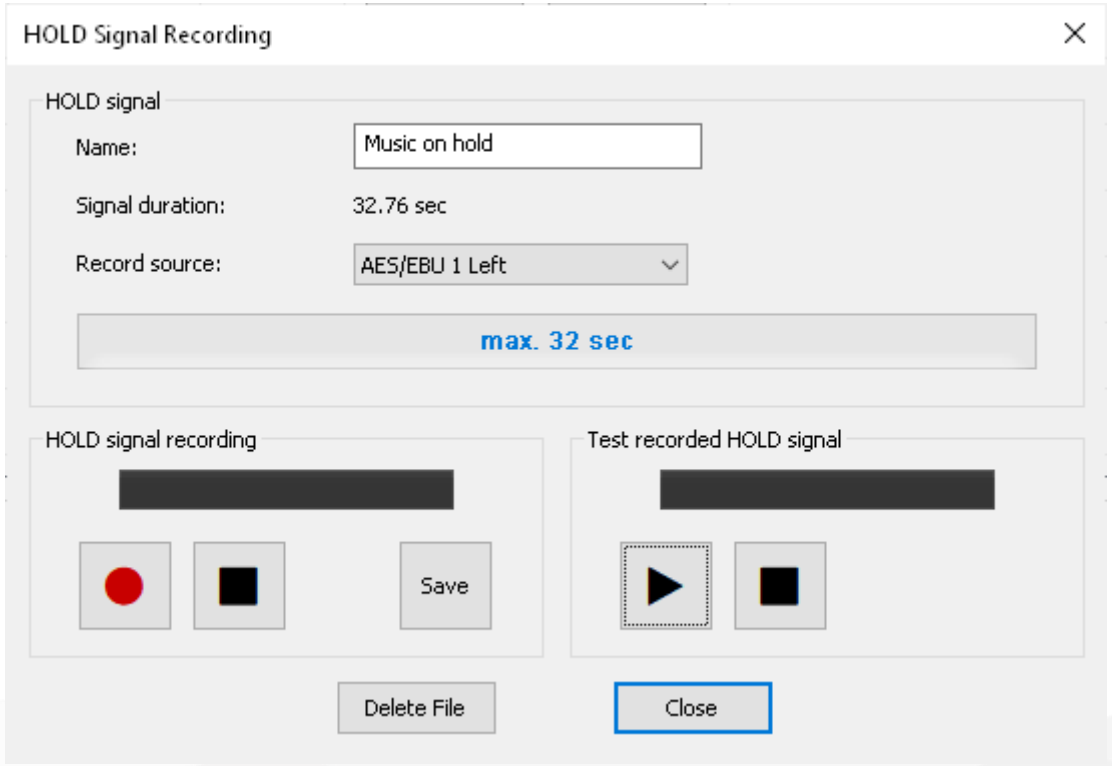
Mode & Audio Line (6)



Internal HOLD Signals (1)

- Manage HOLD signal audio files on the INTERNAL HOLD SIGNALS page.
- The MAGIC THipPro provides six slots for audio files being up to 32 seconds long.
- These file can be played repeatedly as HOLD signal or as an intro when a caller is put on hold.
- The six slots are presented in a table:
  - NAME: Enter a label for the audio file to reference it in other configurations.
  - LENGTH: Length of the stored audio file in seconds.
  - IMPORT: You can import an audio file. Only the first 32 seconds of the audio file are imported. The import module supports WAVE and MP3 audio files. They are automatically converted to a mono file with 16 kHz sampling frequency.
  - RECORD/PLAY: Opens a window to record, play and delete internal Hold signal files. (See next page for details.)
- PC PATH OF DYNAMIC HOLD SIGNAL: Enter the path of a Hold signal file stored on the PC or a network drive. The PC software then imports the file. The PC software on the PC which serves as master checks if the file has changed and automatically updates the Hold signal if necessary.
  - Note: A path can only be entered if a static Hold Signal is already recorded or imported. This file serves as a fallback if there is a problem with importing the file from the specified path.
  - An updated file is detected and imported within 2 minutes.

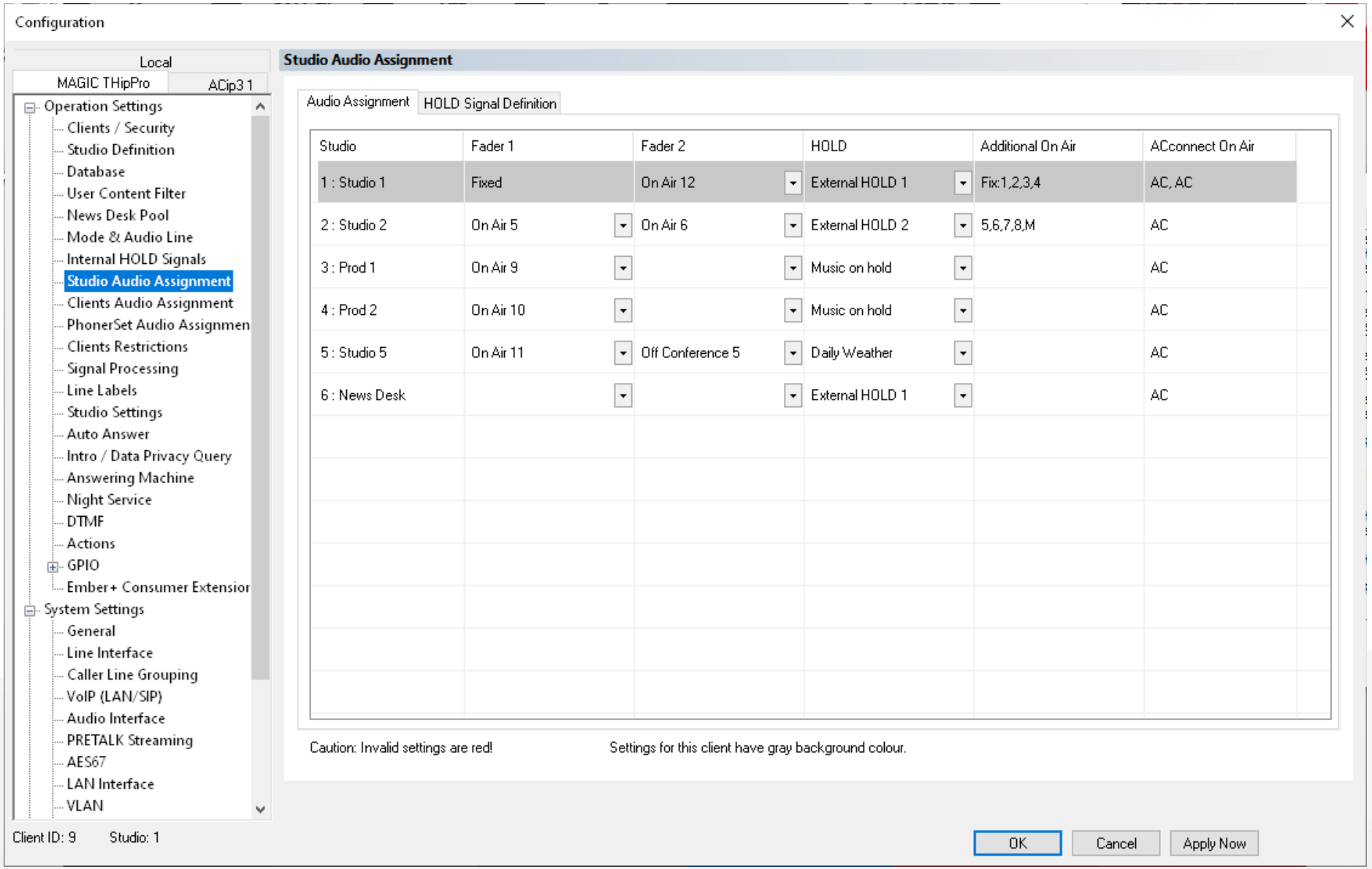
Internal HOLD Signals (2)



Internal HOLD Signal Recording (1)

- Use the RECORD/PLAY button on the INTERNAL HOLD SIGNALS page to open the HOLD SIGNAL RECORDING window.
- NAME: Enter a label for the audio file to reference it in other configurations.
- SIGNAL DURATION: Length of the currently stored Hold signal file.
- RECORD SOURCE: Select an audio interface of the MAGIC THipPro. You can choose from:
  - All Handset interfaces
  - All Analogue Audio interfaces
  - All AES/EBU channels
  - All AES67 channels
  - All DANTE channels
  - The Pretalk Audio Stream assigned to the PC which is recording the Hold signal.
- PROGRESS BAR: Shows the length of the Hold signal being recorded.
- HOLD SIGNAL RECORDING: Control the recording of a Hold signal:
  - LEVEL METER: Shows the level of the audio signal on the selected Record Source.
  - RECORD BUTTON: Starts recording.
  - STOP BUTTON: Stops recording
  - SAVE: Stores the file on the MAGIC THipPro.
- TEST RECORDED HOLD SIGNAL
  - LEVEL METER: Level of the recording being played back.
  - PLAY BUTTON: Playback of the recording.
- DELETE FILE: Delete the Hold signal file from the MAGIC THipPro

Internal HOLD Signal Recording (2)



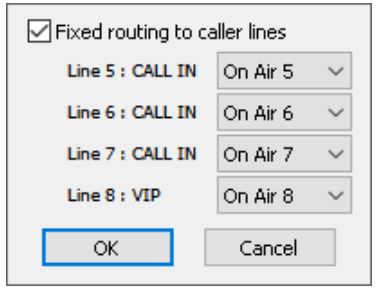
Studio Audio Assignment (1)

- Define which audio lines are used in the studios on the AUDIO ASSIGNMENT tab of the STUDIO AUDIO ASSIGNMENT page.
- Settings that are not valid are displayed in red.
- STUDIO: Displays the name of the studio as defined on the STUDIO DEFINITION configuration page.
- By default, the system presents the same two On-Air fader buttons on each telephone line. Alternative assignments can be defined under ADDITIONAL ON AIR.
- FADER 1: Select an audio line from the drop-down list for On-Air fader 1.
  - ON AIR N: Assigns the On-Air audio line to fader 1.
  - HIDDEN: The fader 1 button is not displayed on the main panel of the LAN Client and Screener Client PC software.
  - NOT USED: The fader 1 button is shown on the main panel of the LAN Client PC software but deactivated. The fader 1 button is not displayed on the main panel of the Screener Client PC software.
- FADER 2: Select an audio line from the drop-down list for On-Air fader 2.
  - ON AIR N: Assigns the On-Air audio line to fader 2.
  - OFF CONFERENCE N: Assigns the off-conference audio line of the respective studio to fader 2.
  - NOT USED : The fader 2 button is not displayed on the main panel of the LAN Client and Screener Client PC software.

Studio Audio Assignment (2)

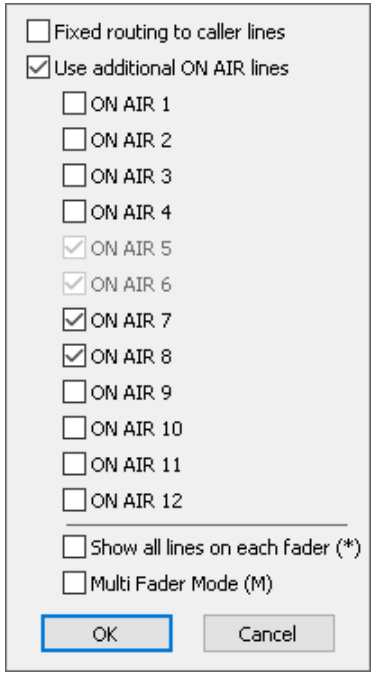
- HOLD: Select a Hold signal from the drop-down list.
  - ON AIR: Depending on the configuration of ADDITIONAL ON AIR:
    - OFF or USE ADDITIONAL ON AIR LINES: Use the mix-minus (clean feed) of the last used On-Air audio line.
    - FIXED ROUTING TO CALLER LINES: Use the Mix-minus (clean feed) of the respective On-Air audio line.
  - ON AIR N: Use the Mix-minus (clean feed) of a specific On-Air audio line.
  - Internal Hold signal identified by its name: Use a hold signal which is stored on the MAGIC THipPro as defined on the INTERNAL HOLD SIGNALS configuration page.
  - EXTERNAL HOLD SIGNAL N: Use an external audio signal as defined on the MODE & AUDIO LINE configuration page.

- ADDITIONAL ON AIR: Configure more complex distributions of audio lines here. Click on the cell to open the configuration window:



  - FIXED ROUTING TO CALLER LINES: Enable this option to set Fader 1 to a separate audio line for each telephone line. Any On-Air audio line can be assigned to as many telephone lines as desired. The fixed routing mode can only be configured per studio, not per client.

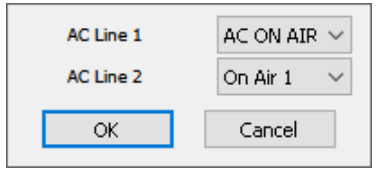
Studio Audio Assignment (3)



- USE ADDITIONAL ON AIR LINES: Enable this option to assign three or more On-Air audio lines to the telephone lines of the studio. The audio lines of the studio will also be available on the ACconnect lines. Access these audio lines via long clicking the ON AIR buttons on the main panel of the LAN Client PC software. They are presented in a pop-up window.

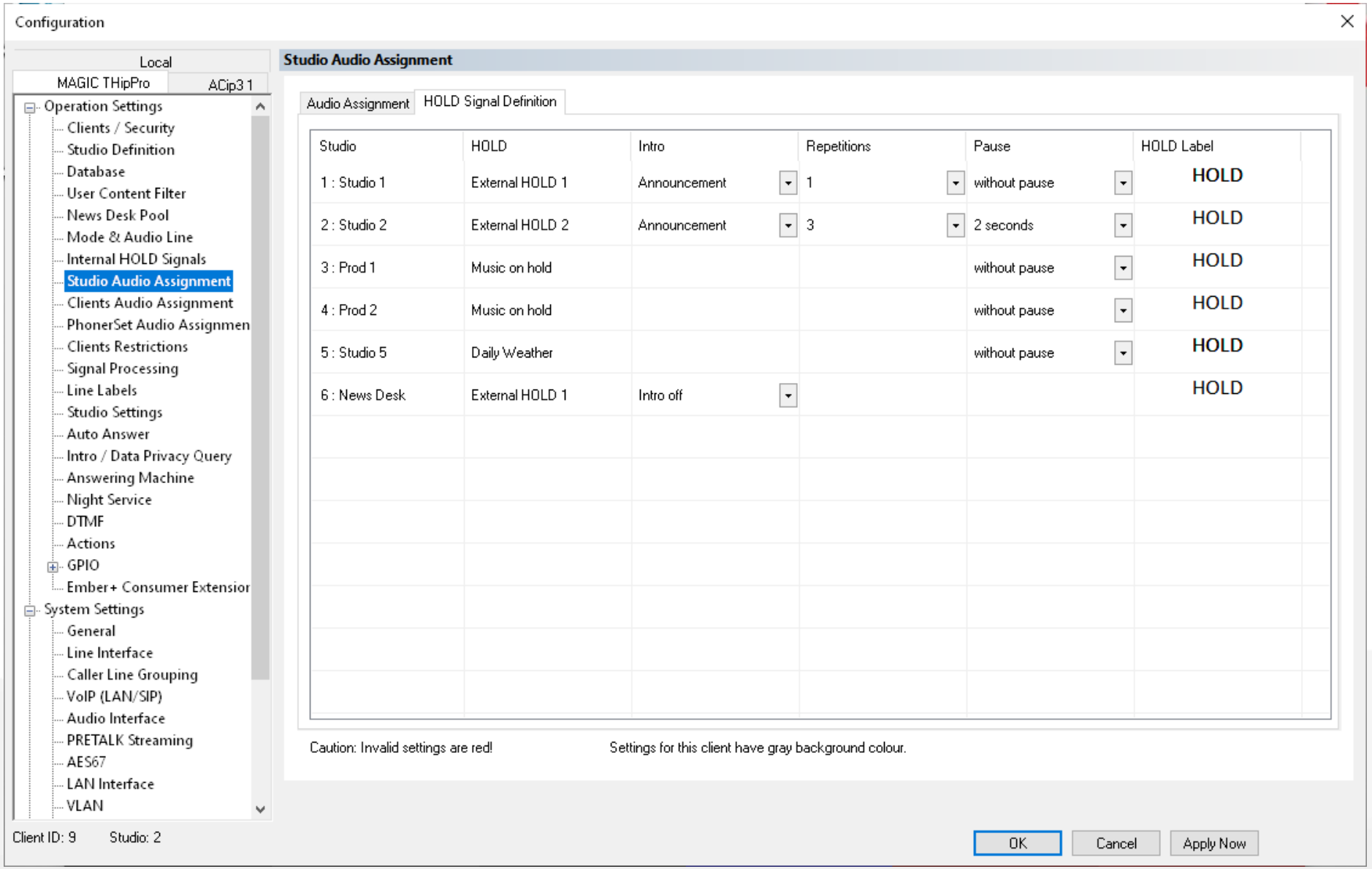
- SHOW ALL LINES ON EACH FADER (*): When ADDITIONAL ON AIR LINES are configured, the On-Air audio line of Fader 1 is not provided in the pop-up window of Fader 2 and vice versa. Enable this option to include these On-Air audio lines in the pop-up windows as well. An asterisk (*) is displayed in the Additional On-Air column of the table to indicate that this option is enabled.
- MULTI FADER MODE (M): Enable this option to display up to four On-Air buttons on the main panelof the LAN Client PC software when ADDITIONAL ON AIR LINES are configured. The letter M (M) is displayed in the Additional On-Air column of the table to indicate that this option is enabled. (This setting only affects the LAN Client PC software.)

Studio Audio Assignment (4)



- ACCONNECT ON AIR: Define the default On-Air audio line of the available ACconnect lines on the LAN Client PC software.
  - AC ON AIR: The native audio interface of the Codec as configured on the ACCONNECT configuration page.
  - ON AIR N: An audio line of the MAGIC THipPro. The audio signal is streamed to the MAGIC THipPro with limited audio quality. The native audio interface remains available via long click on the On-Air button.
  - Note: This configuration does not affect the Screener Client PC software.

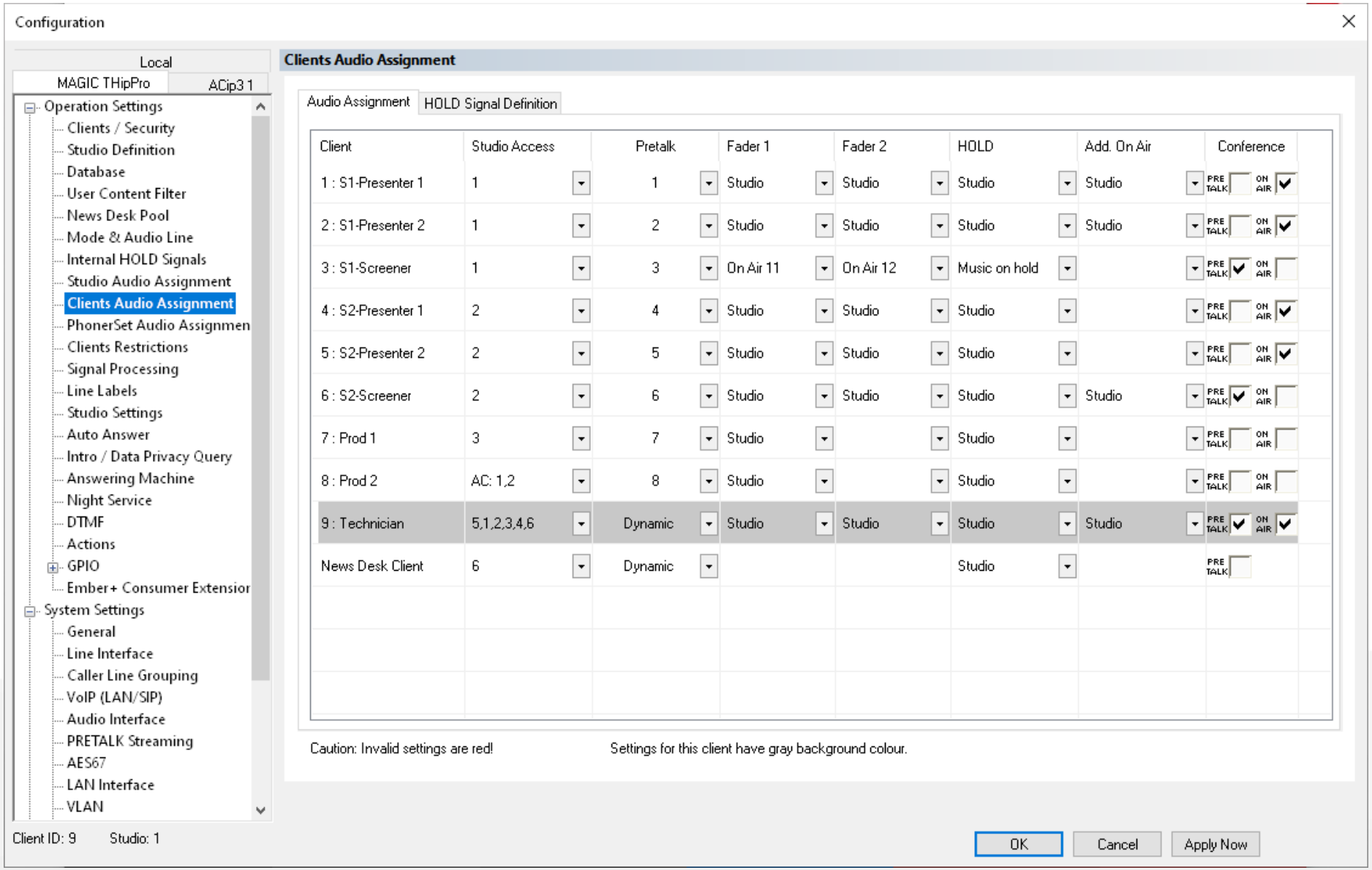
Studio Audio Assignment (5)



Studio Audio Assignment (7)

- Define the details of the Hold signals on the HOLD SIGNAL DEFINITION tab of the STUDIO AUDIO ASSIGNMENT page.
- Settings that are not valid are displayed in red.
- STUDIO: Displays the name of the studio as defined on the STUDIO DEFINITION page.
- HOLD: Displays the Hold signals as it is configured on the AUDIO ASSIGNMENT tab of the STUDIO AUDIO ASSIGNMENT page.
- INTRO: An external Hold signal or an On-Air Hold signal can be preceded by an intro when a call is accepted directly onto Hold. This is usually used with Auto Answer onto Hold.
  - INTRO OFF: No Intro. When a call is accepted onto hold the configured hold signal starts playing immediately.
  - Internal Hold signal identified by its name.
- REPETITIONS: An intro can be played up to seven times.
- PAUSE: Set the pause between the repetitions of the intro to 0 – 7 seconds.
- HOLD LABEL: Define the inscription on the Hold button on the main panel of the LAN Client PC software.

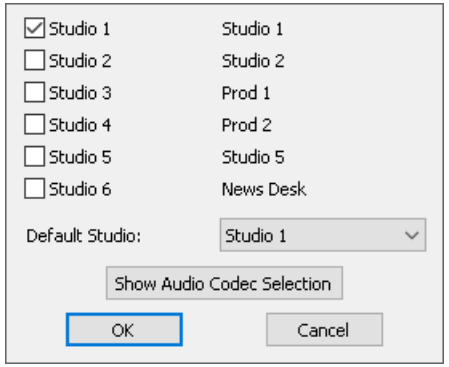
Studio Audio Assignment (8)



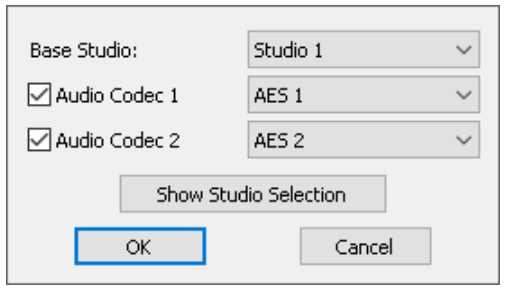
Clients Audio Assignment (1)

- Define which audio lines are used by the clients on the AUDIO ASSIGNMENT tab of the CLIENTS AUDIO ASSIGNMENT page.
- Settings that are not valid are displayed in red.
- CLIENT: Displays the name of the client as defined on the CLIENTS / SECURITY configuration page.
- By default, the system presents the same two On-Air fader buttons on each telephone line. Alternative assignments can be defined under ADDITIONAL ON AIR.
- STUDIO ACCESS: Click on a cell to open the studio access configuration window.
  - Select the studios to which the client should have access.
  - DEFAULT STUDIO: Select the studio to which the client connects after starting the PC software.
  - SHOW AUDIO CODEC SELECTION: Switches to the exclusive audio codec mode if a MAGIC ACip3 audio codec is connected the MAGIC THipPro via

ACconnect. In this mode no telephone lines are displayed on the main panel of the LAN Client and Screener Client PC software. Just the audio codec channels are available to the user.



Clients Audio Assignment (2)



- AUDIO CODEC SELECTION: In this mode no telephone lines are displayed on the main panel of the LAN Client and Screener Client PC software. Just the audio codec channels of a MAGIC ACip3 connected to the MAGIC THipPro via ACconnect are available to the user.
  - BASE STUDIO: Select a studio for the client. The client adheres to the studio related settings such as database, logo, recording folder, etc.
  - AUDIO CODEC N
    - Enable a codec channel to display it on the main panel of the PC software.
    - Select the audio interface of the audio codec for this client.

- SHOW STUDIO SELECTION: Switches to the standard telephone hybrid mode. In this mode telephone lines and optional audio codec lines are displayed on the main panel of the LAN Client and Screener Client PC software.

Clients Audio Assignment (3)

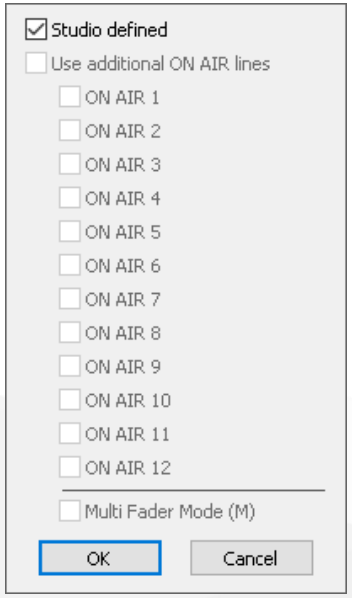
- PRETALK: Assign a pretalk audio line exclusively to a client:
  - PRETALK N: An audio interface assigned on the MODE / AUDIO LINE configuration page.
  - PHONERSET PRETALK N: Use the MAGIC PhonerSet telephone as pretalk interface for a client using the PC software.
    The RX and TX signal of the PhonerSet can be recorded at the PC software using the RECORD button. There must be a DYNAMIC audio stream configured on the MODE & AUDIO LINE configuration page. The dynamic stream must be when the PhonerSet goes to Pretalk to be able to record.
  - DYNAMIC: The client will allocate a pretalk stream whenever the user clicks on the pretalk button on the main panel. If all pretalk streams are already in use the pretalk button turns white.
  - HIDDEN: The pretalk button is not displayed on the main panel of the PC software.
  - NOT USED: The pretalk button is displayed but deactivated on the main panel of the LAN Client PC software. The pretalk button is not displayed on the main panel of the Screener Client.
- FADER 1: Select an audio line from the drop-down list for On-Air fader 1.
  - STUDIO: The client uses the audio line which is configured on the STUDIO AUDIO ASSIGNMENT configuration page. This is the recommended setting especially if a user can access more than one studio.
  - ON AIR N: Assigns the On-Air audio line to fader 1.
  - HIDDEN: The fader 1 button is not displayed on the main panel of the LAN Client and Screener Client PC software.
  - NOT USED: The fader 1 button is shown on the main panel of the LAN Client PC software but deactivated. The fader 1 button is not displayed on the main panel of the Screener Client PC software.

Clients Audio Assignment (4)

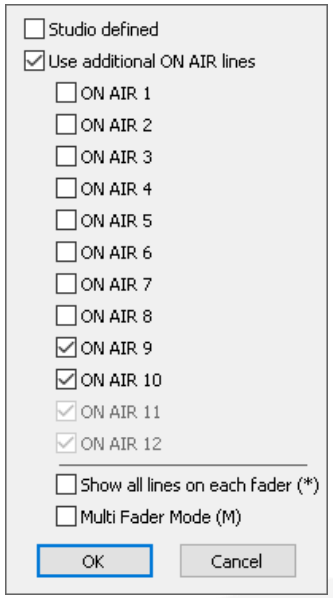
- FADER 2: Select an audio line from the drop-down list for On-Air fader 2.
  - STUDIO: The client uses the audio line which is configured on the STUDIO AUDIO ASSIGNMENT configuration page. This is the recommended setting especially if a user can access more than one studio.
  - ON AIR N: Assigns the On-Air audio line to fader 2.
  - NOT USED : The fader 2 button is not displayed on the main panel of the LAN Client and Screener Client PC software.
- HOLD: Select a Hold signal from the drop-down list.
  - STUDIO: The client uses the audio line which is configured on the STUDIO AUDIO ASSIGNMENT configuration page. This is the recommended setting especially if a user can access more than one studio.
  - ON AIR N: Use the Mix-minus (clean feed) of a specific On-Air audio line.
  - Internal Hold signal identified by its name: Use a hold signal which is stored on the MAGIC THipPro as defined on the INTERNAL HOLD SIGNALS configuration page.
  - EXTERNAL HOLD SIGNAL N: Use an external audio signal as defined on the MODE & AUDIO LINE configuration page.

Clients Audio Assignment (5)

- ADDITIONAL ON AIR: Configure more complex distributions of audio lines here. Click on the cell to open the configuration window.
  - STUDIO DEFINED: The client uses additional On-Air settings which are configured on the STUDIO AUDIO ASSIGNMENT configuration page. This is the recommended setting especially if a user can access more than one studio and also the only way to setup a fixed routing to caller lines.

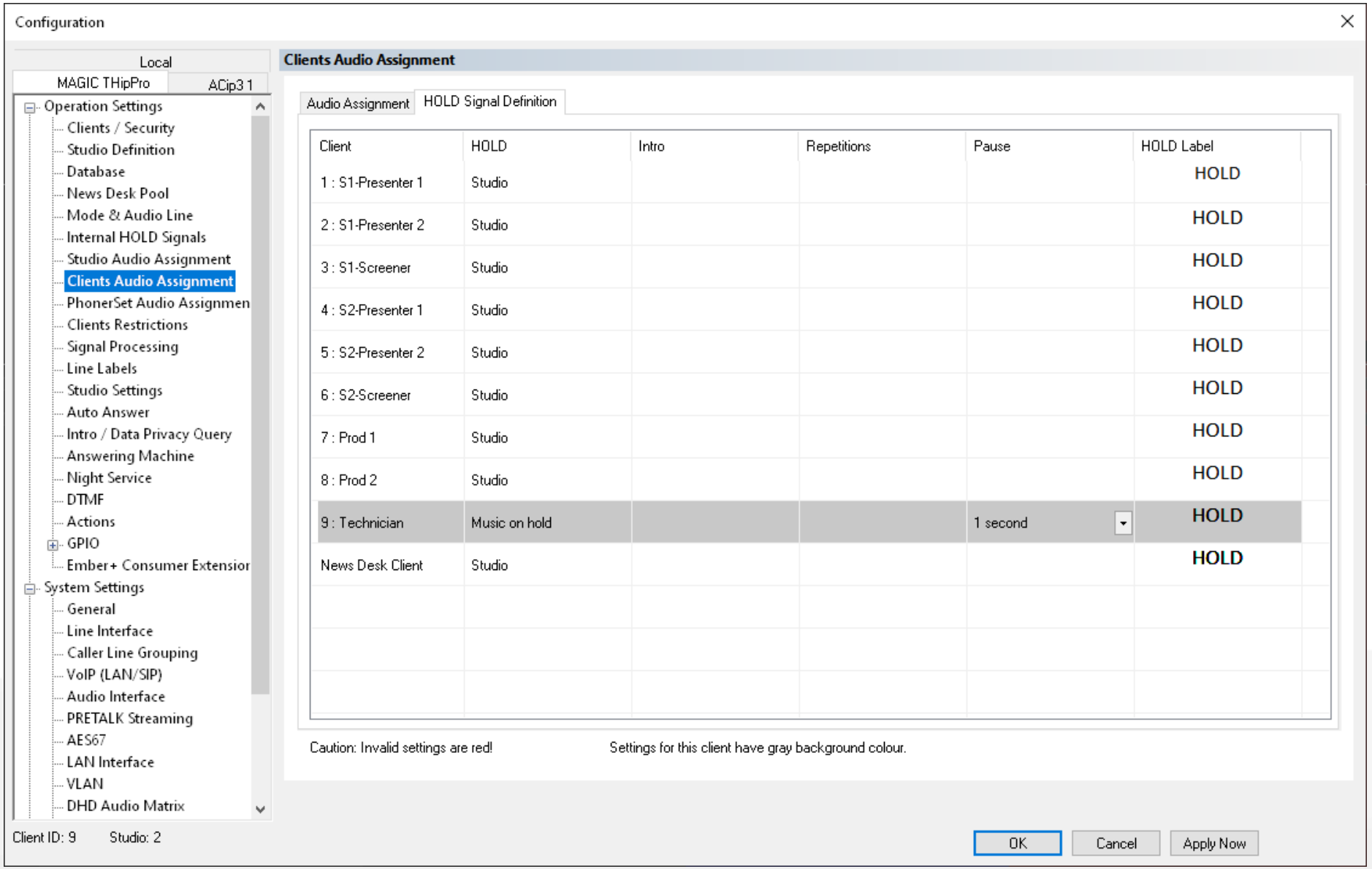


- USE ADDITIONAL ON AIR LINES: Enable this option to assign three or more On-Air audio lines to the telephone lines of the studio. The audio lines of the studio will also be available on the ACconnect lines. Access these audio lines via long clicking the ON AIR buttons on the main panel of the LAN Client PC software. They are presented in a pop-up window.
- SHOW ALL LINES ON EACH FADER (*): When ADDITIONAL ON AIR LINES are configured, the On-Air audio line of Fader 1 is not provided in the pop-up window of Fader 2 and vice versa. Enable this option to include these On-Air audio lines in the pop-up windows as well. An asterisk (*) is displayed in the Additional On-Air column of the table to indicate that this option is enabled.
- MULTI FADER MODE (M): Enable this option to display up to four On-Air buttons on the main panel of the LAN Client PC software when ADDITIONAL ON AIR LINES are configured. The letter M (M) is displayed in the Additional On-Air column of the table to indicate that this option is enabled. (This setting only affects the LAN Client PC software.)



- CONFERENCE: By default only one telephone line at a time can be set to a specific audio line. This means only one caller can be in pretalk on a client. And only one caller can be put on an On-Air Fader in a studio. Enable conferencing to enable the client to put more than one telephone line at a time to an audio line. The MAGIC THipPro mixes the audio signals of all callers and the audio interfaces internally.
  - PRETALK: Enable this option to allow the client to put more than one caller at the same time in pretalk. The audio signals are mixed by the THipPro. All callers and the user can hear each other.
  - ON AIR: Enable this option to allow the client to put more than one caller at the same time on the same On-Air Fader. The audio signals are mixed by the THipPro. All callers can hear each other and the Mix-minus (clean feed).

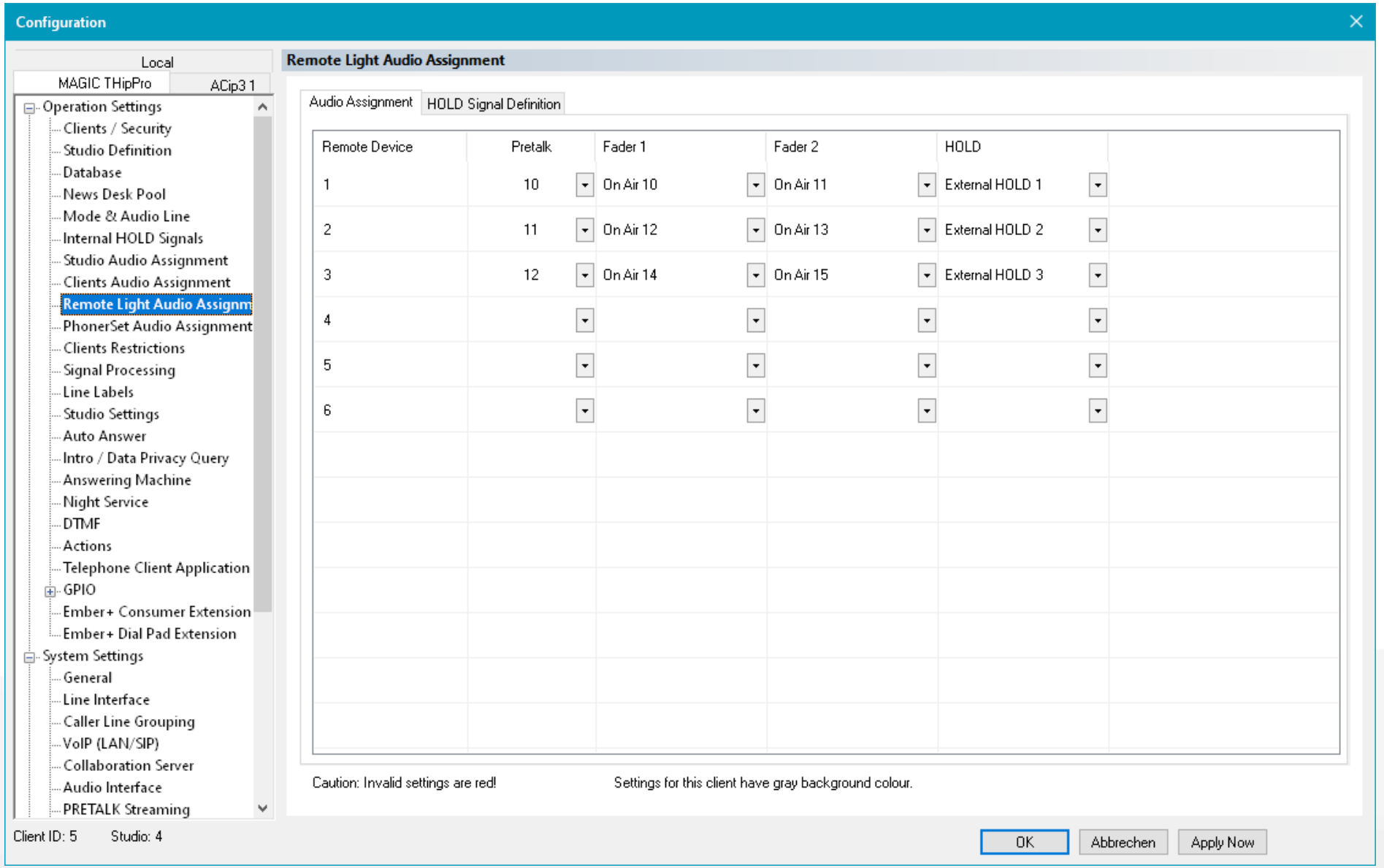
Clients Audio Assignment (8)



Clients Audio Assignment (9)

- Define the details of the Hold signals on the HOLD SIGNAL DEFINITION tab of the CLIENTS AUDIO ASSIGNMENT page.
- Settings that are not valid are displayed in red.
- CLIENT: Displays the name of the client as defined on the CLIENTS / SECURITY page.
- HOLD: Displays the Hold signals as it is configured on the AUDIO ASSIGNMENT tab of the CLIENTS AUDIO ASSIGNMENT page.
- If the Hold signal is set to STUDIO, the further parameters can only be changed on the HOLD SIGNAL DEFINITION tab of the STUDIO AUDIO ASSIGNMENT configuration page.
- INTRO: An external Hold signal or an On-Air Hold signal can be preceded by an intro when a call is accepted directly onto Hold. This is usually used with Auto Answer onto Hold.
  - INTRO OFF: No Intro. When a call is accepted onto hold the configured hold signal starts playing immediately.
  - Internal Hold signal identified by its name.
- REPETITIONS: An intro can be played up to seven times.
- PAUSE: Set the pause between the repetitions of the intro to 0 – 7 seconds.
- HOLD LABEL: Define the inscription on the Hold button on the main panel of the LAN Client PC software.

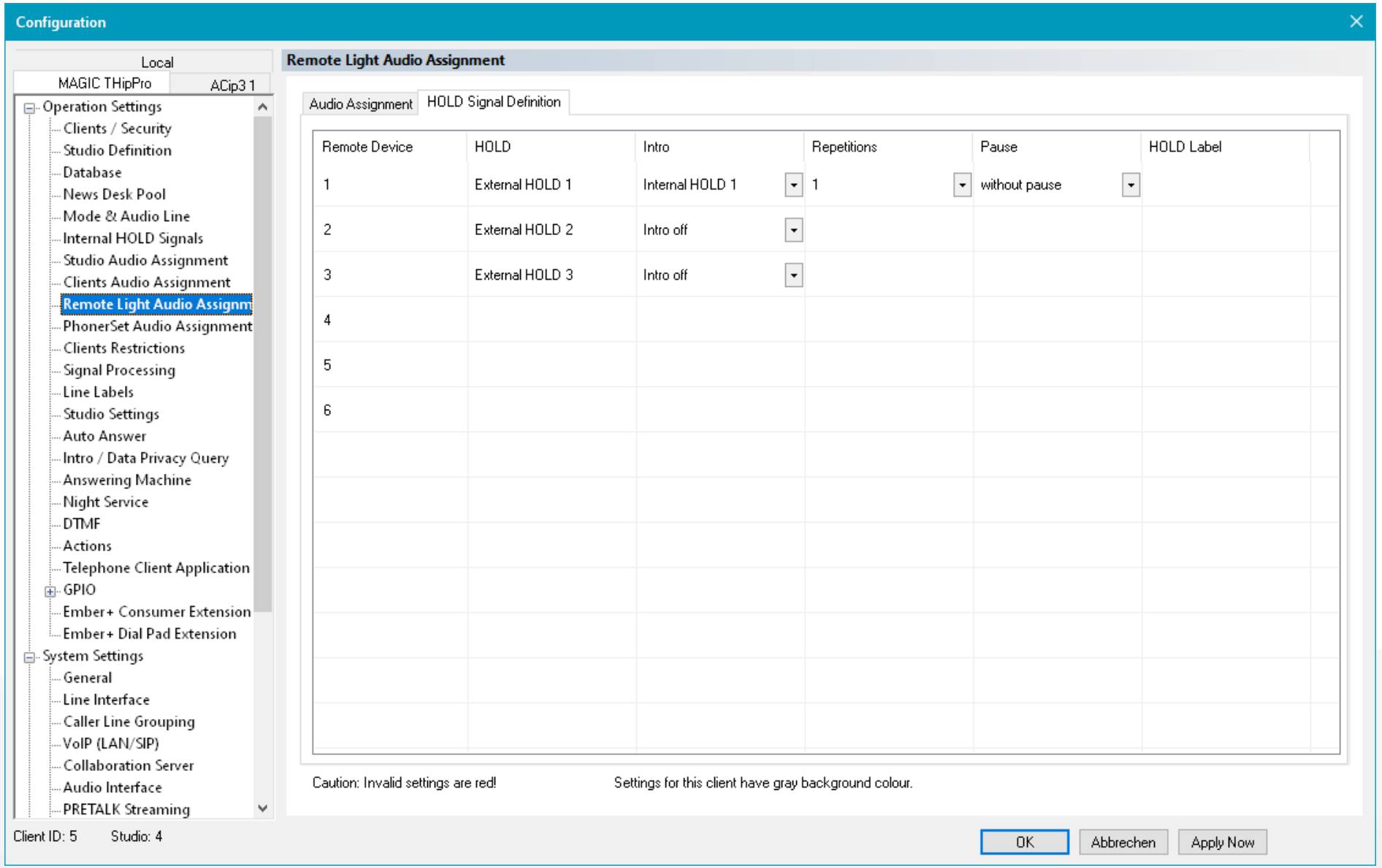
Clients Audio Assignment (10)



Remote Light Audio Assignment (1)

- Define which audio lines are used by the clients which control the THipPro via the Remote Light Protocol.
- PRETALK: Assign a pretalk audio line exclusively to a client:
  - PRETALK N: An audio interface assigned on the MODE / AUDIO LINE configuration page.
  - NOT USED: No audio line assigned for pretalk.
- FADER 1: Select an audio line from the drop-down list for On-Air fader 1.
  - ON AIR N: Assigns the On-Air audio line to fader 1.
  - FADER ON AIR: Each line has its own audio line (line 1 = On Air 1, line 2 = On Air 2, …)
  - NOT USED: No audio line assigned for fader 1.
- FADER 2: Select an audio line from the drop-down list for On-Air fader 2.
  - ON AIR N: Assigns the On-Air audio line to fader 1.
  - FADER ON AIR: Each line has its own audio line (line 1 = On Air 1, line 2 = On Air 2, …)
  - NOT USED: No audio line assigned for fader 1.
- HOLD : Select a Hold signal from the drop-down list.
  - ON AIR N: Use the Mix-minus (clean feed) of a specific On-Air audio line.
  - Internal Hold signal identified by its name: Use a hold signal which is stored on the MAGIC THipPro as defined on the INTERNAL HOLD SIGNALS configuration page.
  - EXTERNAL HOLD SIGNAL N: Use an external audio signal as defined on the MODE & AUDIO LINE configuration page.
  - NOT USED: No audio source assigned for hold.

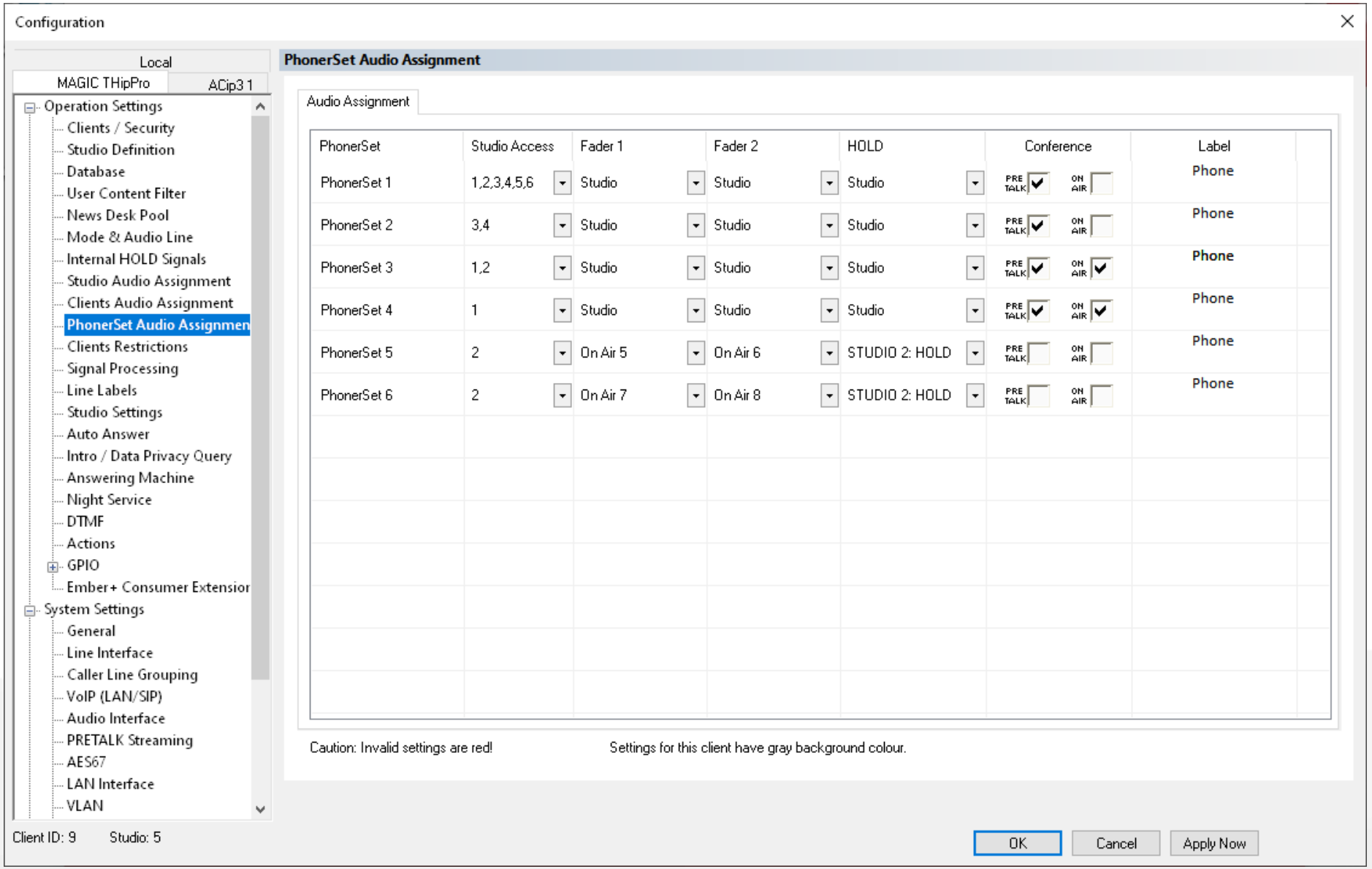
Remote Light Audio Assignment (2)



Remote Light Audio Assignment (3)

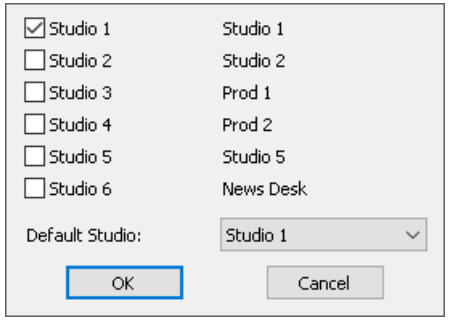
- Define the details of the Hold signals on the HOLD SIGNAL DEFINITION tab of the CLIENTS AUDIO ASSIGNMENT page.
- Settings that are not valid are displayed in red.
- REMOTE DEVICE: Number of the workplace.
- HOLD: Displays the Hold signals as it is configured on the AUDIO ASSIGNMENT tab of the REMOTE LIGHT AUDIO ASSIGNMENT page.
- INTRO: An external Hold signal or an On-Air Hold signal can be preceded by an intro when a call is accepted directly onto Hold. This is usually used with Auto Answer to Hold.
  - INTRO OFF: No Intro. When a call is accepted onto hold the configured hold signal starts playing immediately.
  - Internal Hold signal identified by its name.
- REPETITIONS: An intro can be played up to seven times.
- PAUSE: Set the pause between the repetitions of the intro to 0 – 7 seconds.
- HOLD LABEL: Configure the label for the Hold button. It is shown on PC clients when the line was operated by a Remote Light workplace.

Remote Light Audio Assignment (4)



PhonerSet Audio Assignment (1)

- Define which audio lines are used by the PhonerSet clients on the AUDIO ASSIGNMENT tab of the PHONERSET AUDIO ASSIGNMENT page.
- STUDIO ACCESS: Click on a cell to open the studio access configuration window.



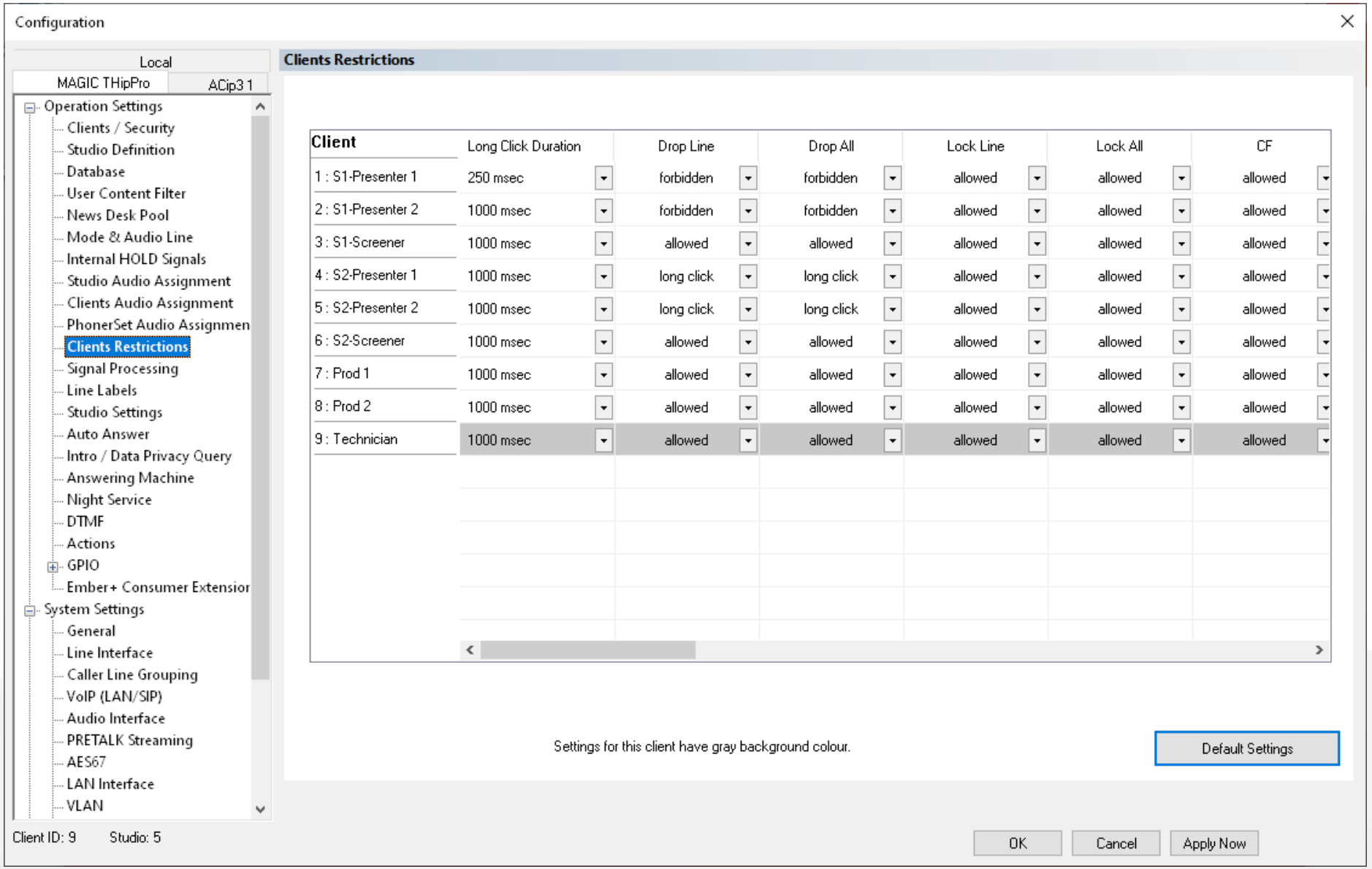
  - Select the studios to which the PhonerSet workplace will have access.
  - DEFAULT STUDIO: Select the studio to which the PhonerSet app connects after starting up.

- FADER 1/2: Select an audio line from the drop-down list for On-Air fader 1/2.
  - STUDIO: The PhonerSet uses the audio line which is configured on the STUDIO AUDIO ASSIGNMENT configuration page. The current studio is taken into account. This is the recommended setting especially if a user can access more than one studio.
  - ON AIR N: Assigns the On-Air audio line to the fader.
  - NOT USED : The On-Air fader button is not displayed on the main panel of the PhonerSet app.

PhonerSet Audio Assignment (2)

- HOLD: Select a Hold signal from the drop-down list.
  - STUDIO: The client uses the audio line which is configured on the STUDIO AUDIO ASSIGNMENT configuration page. The current studio is taken into account. This is the recommended setting especially if a user can access more than one studio.
  - HOLD (STUDIO N): Use the Hold signal of a specific studio.
  - HOLD (NEWS DESK CLIENT): Use the Hold signal of the News Desk Client configured on the Clients Audio Assignment page.
  - NOT USED: The Hold button is not displayed on the main panel of the PhonerSet app.
- CONFERENCE: By default only one telephone line at a time can be set to a specific audio line. This means only one caller can be in pretalk on a client. And only one caller can be put on an On-Air Fader in a studio. Enable conferencing to enable the PhonerSet to put more than one telephone line at a time to an audio line. The MAGIC THipPro mixes the audio signals of all callers and the audio interfaces internally.
  - PRETALK: Enable this option to allow the PhonerSet to put more than one caller at the same time in pretalk. The audio signals are mixed by the THipPro. All callers and the user can hear each other.
  - ON AIR: Enable this option to allow the PhonerSet to put more than one caller at the same time on the same On-Air Fader. The audio signals are mixed by the THipPro. All callers can hear each other and the Mix-minus (clean feed).
- LABEL: Click to change the label on the Pretalk button of the MAGIC THipPro LAN Client PC software which has the PhonerSet configured as pretalk audio line on the CLIENTS AUDIO ASSIGNMENT configuration page. Font and font size can also be changed.

PhonerSet Audio Assignment (3)



Clients Restrictions (1)

- Manage permissions for each client on the CLIENTS RESTRICTIONS page.
- Possible values for most of the functions are:
  - ALLOWED: The client is allowed to use that function.
  - FORBIDDEN: The client is not allowed to use that function.
  - LONG-CLICK: Some functions could be made accessible by long clicking on a button.
- Each line of the table shows the permissions of a client.
- Each column controls a function :
  - LONG CLICK DURATION: Specify how long the user must press the button so that it is recognized as “long clicked” (250 ms - 2000 ms).
  - DROP LINE: Define if the client can disconnect a line. However, the button is always displayed on the main panel of the PC software. (allowed, forbidden, long-click)
  - DROP ALL: Define if the client can disconnect all lines of a line group. (allowed, forbidden, long-click)
  - LOCK LINE: Define if the client can lock lines so all incoming calls are dismissed automatically. (allowed, forbidden, long-click)
  - LOCK ALL: Define if the client can lock all lines of a line group. Set to forbidden to integrate LOCK ALL with the LIMIT CALL IN function. (allowed, forbidden long-click)
  - LIMIT CALL IN: Define if a client can limit the number of simultaneous incoming calls on a line group. (allowed, forbidden long-click)
  - CF: Define if the client can forward calls. (allowed, forbidden, long-click)
  - CF TOGGLE: Define if the client can switch between the first and the second default call forwarding telephone number on the LAN Client PC software. (allowed, forbidden, long-click)
  - VOLUME CONTROL: Define if the client can adjust the level of the caller via the LAN Client PC software. (allowed, forbidden)

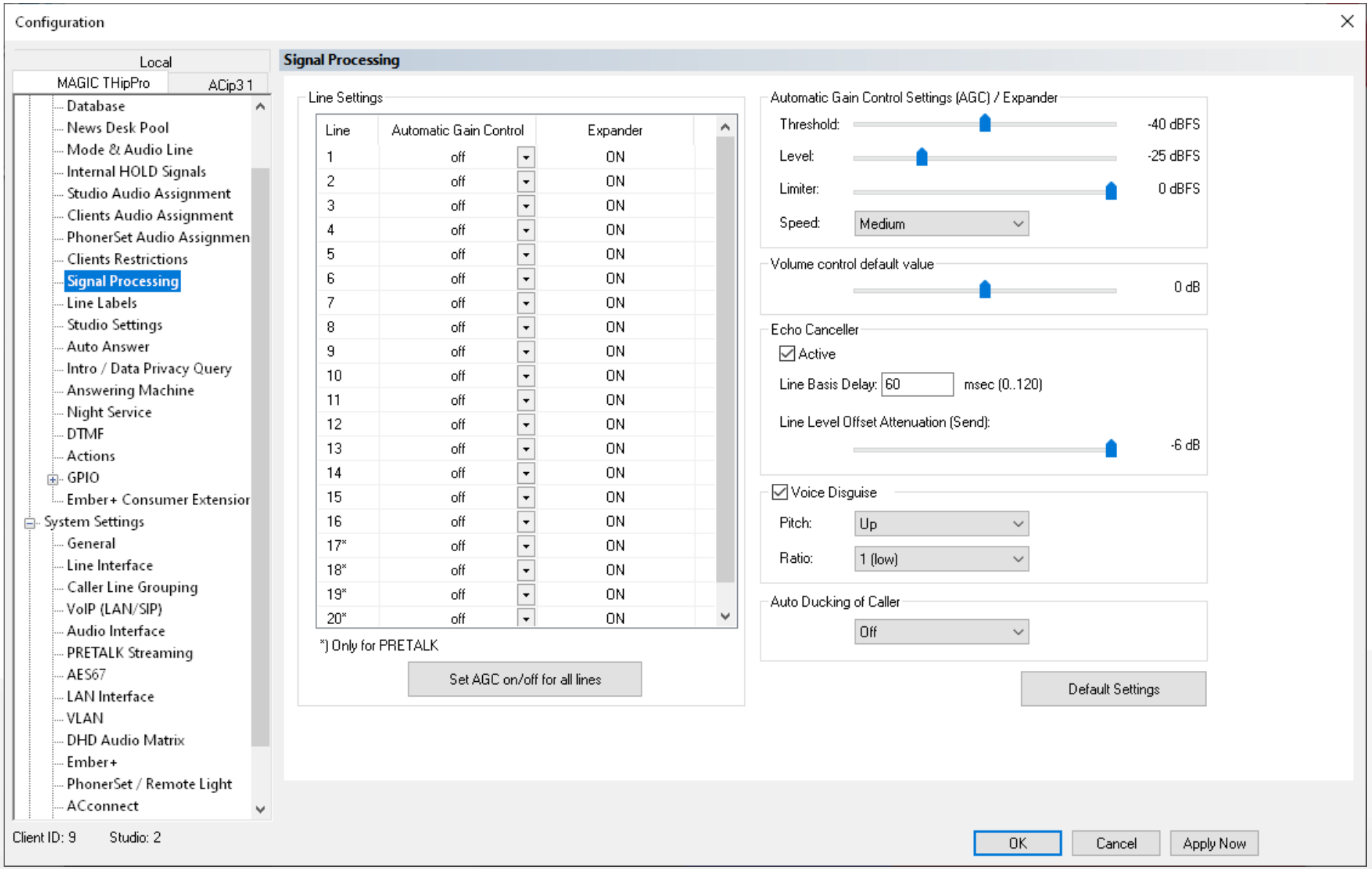
Clients Restrictions (2)

- AGC TOGGLE: Define if the client can switch the AGC on and off on the main panel of the LAN Client PC software. (allowed, forbidden)
- SEND DTMF: Define if the client can send DTMF tones via the main panel of the LAN Client PC software. (allowed, forbidden)
- RESET DTMF: Define if the client can reset the display of received DTMF tones. (allowed, forbidden, long-click)
- HOLD READY: Define if the client can set the state of line to Hold ready by clicking the HOLD button twice in the LAN Client and Screener Client PC software (allowed, forbidden)
- ACTIVATE LINE: Manage how call details (audio line, phone number, name, …) on the line on LAN Client and Screener Client PC software are shown.
  - ALWAYS: The call details are always displayed.
  - HOLD READY: The call details are only shown when the caller was set to HOLD READY by another client. Otherwise, the line is disabled.
  - INCOMING CALLS AND HOLD READY: The call details are only shown when the caller was set to HOLD READY by another client or an incoming call is ringing. Otherwise, the line is disabled.
- ANONYMITY REQUEST: A caller may request that his name not be mentioned On-Air. The screener then sets the "Anonymous" flag in the caller's record. This restriction manages how the PC software displays the caller's data on the main panel:
  - RESPECT: The LAN Client PC software as well as the Screener Client PC software in Presenter mode display * Anonymity Requested *. The Screener Client PC software always displays the caller’s data.
  - IGNORE: The PC software displays the caller’s data.
- MANAGE PRESETS: Define if the client can open the preset manager on the PC software. (allowed, forbidden)
- LOAD SUPER PRESET: Define if the client can load a super preset from the PC software. (allowed, forbidden)

Clients Restrictions (3)

- LOAD PRESET: Define if the client can load a preset from the PC software. (allowed, forbidden)
- SELECT STUDIO: Manage how a client which has access to more than one studio can switch between studios:
  - ALLOWED: The user may switch between studios.
  - FORBIDDEN: The client cannot switch between studios at all.
  - GP INPUT: The client can only switch between studios via a GP input (TTL, DHD SetLogic, Ember+)
- PHONE BOOK: Define if the client can use the phone book button on the menu bar of the LAN Client PC software. (allowed, forbidden, long-click)
- ENABLE DATA EDIT: Define if the client can create or change records in the phone book database via the PC software. (allowed, forbidden, long-click)
- VOICE DISGUISE: Define if the client can activate voice disguise for line groups from the menu bar of the PC software. (allowed, forbidden, long-click)
- ANSWERING MACHINE: Define if the client can activate the answering machine. (allowed, forbidden)
- NIGHT SERVICE: Define if the client can activate the night service. (allowed, forbidden)
- AUDIO CODEC LINE: Manage how ACconnect audio codec lines are displayed in the PC software.
  - ALLOWED: The ACconnect lines are displayed and fully operational.
  - ON AIR DISABLED: The ACconnect lines are displayed with the On-Air button disabled.
  - HIDDEN: The ACconnect audio codec lines are not displayed.
- RECEIVE GROUP CHAT: Define if group messages are displayed on the client's chat windows (yes, no)
- USER LOGIN: Define if a user can login to the user content filter form the PC software. (allowed, forbidden)

Clients Restrictions (4)



Signal Processing (1)

- Define the signal processing parameters on the SIGNAL PROCESSING page.
- LINE SETTINGS:
  - AUTOMATIC GAIN CONTROL: The AGC controls the amplifier which processes the audio signal of the caller. Enable the AGC to maintain a certain audio level despite variations in the caller's voice or differences between callers. The AGC parameters can be modified under AUTOMATIC GAIN CONTROL SETTINGS (AGC) / EXPANDER.
    The user can enable or disable the AGC for each call individually by clicking on the level meter on the main panel of the LAN Client PC software.
  - EXPANDER: There are expander filters for all telephone line inputs and outputs. The expanders are always on. They lower the level of quiet audio signals even more to reduce noise. The threshold under AUTOMATIC GAIN CONTROL SETTINGS (AGC) / EXPANDER is used for AGC and the expander for received audio signals. The threshold for transmitted audio signals is -52 dBFS.
- AUTOMATIC GAIN CONTROL SETTINGS (AGC) / EXPANDER: Define the filter parameters for AGC and expander.
  - THRESHOLD: The AGC is only applied to audio signals above this level. The expander is only applied to audio signals below this level.
  - LEVEL: Define the target level for the AGC. The AGC tries to maintain this level for the audio signal of the caller. By default the amplifier has a range of 32 dB. Which means it can lower the signal by 16 dB and amplify the signal by 16 dB. If the target level is set higher than -20 dBFS the range of 32 dB remains but splits differently. The higher the target level the more amplification is possible at the cost of lowered possible attenuation.

Signal Processing (2)

- LIMITER: By default the limiter clips the audio signal at 0 dBFS. If AGC is enabled the limiter threshold can be adjusted in the range between the AGC level and 0 dBFS.
  The AGC reacts relatively slow to changes in the level of an audio signal. Otherwise the AGC would constantly adjust the amplification and the caller's voice would sound unsteady.
  Imagine a caller who starts to talk very quietly but suddenly gets very loud. The amplification would be high in the beginning and the sudden loud voice would get even louder until the AGC adjusts the amplification to the new level. The limiter can react within milliseconds and lower the audio signal immediately.
- SPEED: Define how fast the AGC should adjust to changes in the audio signal coming from the caller. (SLOW, MEDIUM, FAST, VERY FAST)

- VOLUME CONTROL DEFAULT VALUE: The level of the audio signal coming from the caller can be adjusted manually in the LAN Client PC software if AGC is disabled. Define the default amplification here. It is set each time a call is disconnected so, the next call starts with the default value.

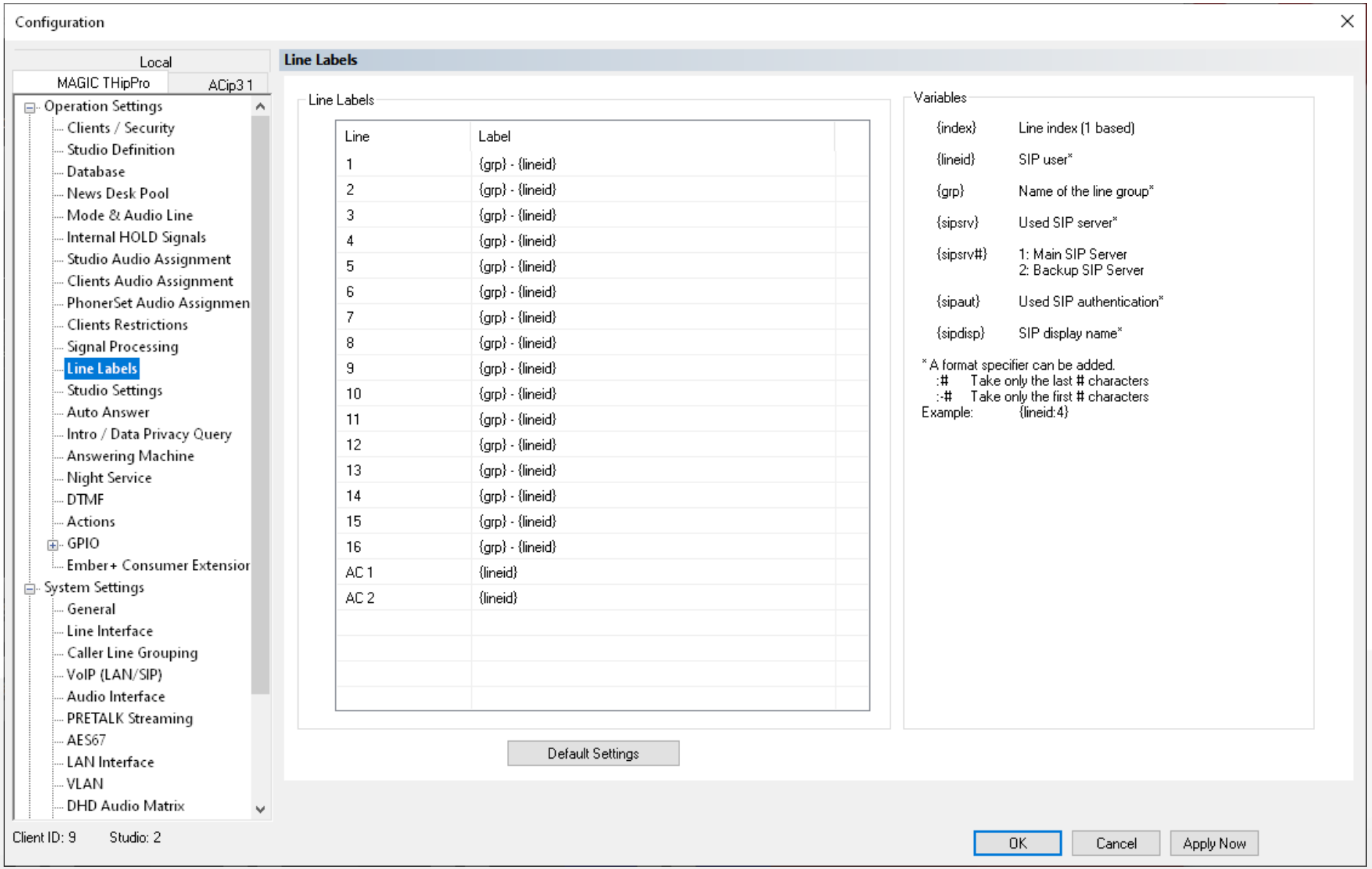
Signal Processing (3)

- ECHO CANCELLER: The echo canceller eliminates echo coming back from the caller in POTS, ISDN and VoIP mode. It is not used for HD-Voice calls. There is a dedicated echo canceller for each telephone line.
  It is recommended to adjust the audio levels so that TX level displayed on the main panel of the PC software is between -18 dBFS and -12 dBFS.
  - ACTIVE: Enables the echo cancellers. Especially analogue telephones cause strong echoes.
  - LINE BASIS DELAY: The echo canceller can detect and eliminate echoes with a delay in a range of 120 ms. Depending on the telephone network there is minimum round-trip time of an echo signal. This timespan can be ignored by the echo canceller. The defined line basis delay moves the 120 ms range of the echo canceller.
    A value of e.g. 60 ms enables the hybrid to eliminate echoes which occur within 60 ms to 180 ms.
  - Recommended values:
    - POTS, ISDN: 0 ms
    - POTS, ISDN with PBX: 40 ms
    - VoIP: 60 ms
  - LINE LEVEL OFFSET ATTENUATION (SEND): Define how much the level of the audio signal being sent over the telephone line to the caller is attenuated. Decrease the value if the returned echo signal is too strong to be eliminated by the echo canceller.

Signal Processing (4)

- VOICE DISGUISE: Enable this option to add the voice disguise button to the line group menus on the main panel of the PC software. Use these buttons to enable the function on all lines of the respective line group.
  - PITCH: Set to UP to shift the voice to higher notes. Set to DOWN to shift the voice to lower notes.
  - RATIO: Define how strong the effect should be. Range: 1 (low) …. 4 (high)
- AUTO DUCKING OF CALLER: Define how much the caller's voice is attenuated when an audio signal is sent to the caller e.g. when the presenter speaks.
  Range: Off, -6 dB … -42 dB
- DEFAULT SETTINGS: Sets the parameters on this page to factory default.

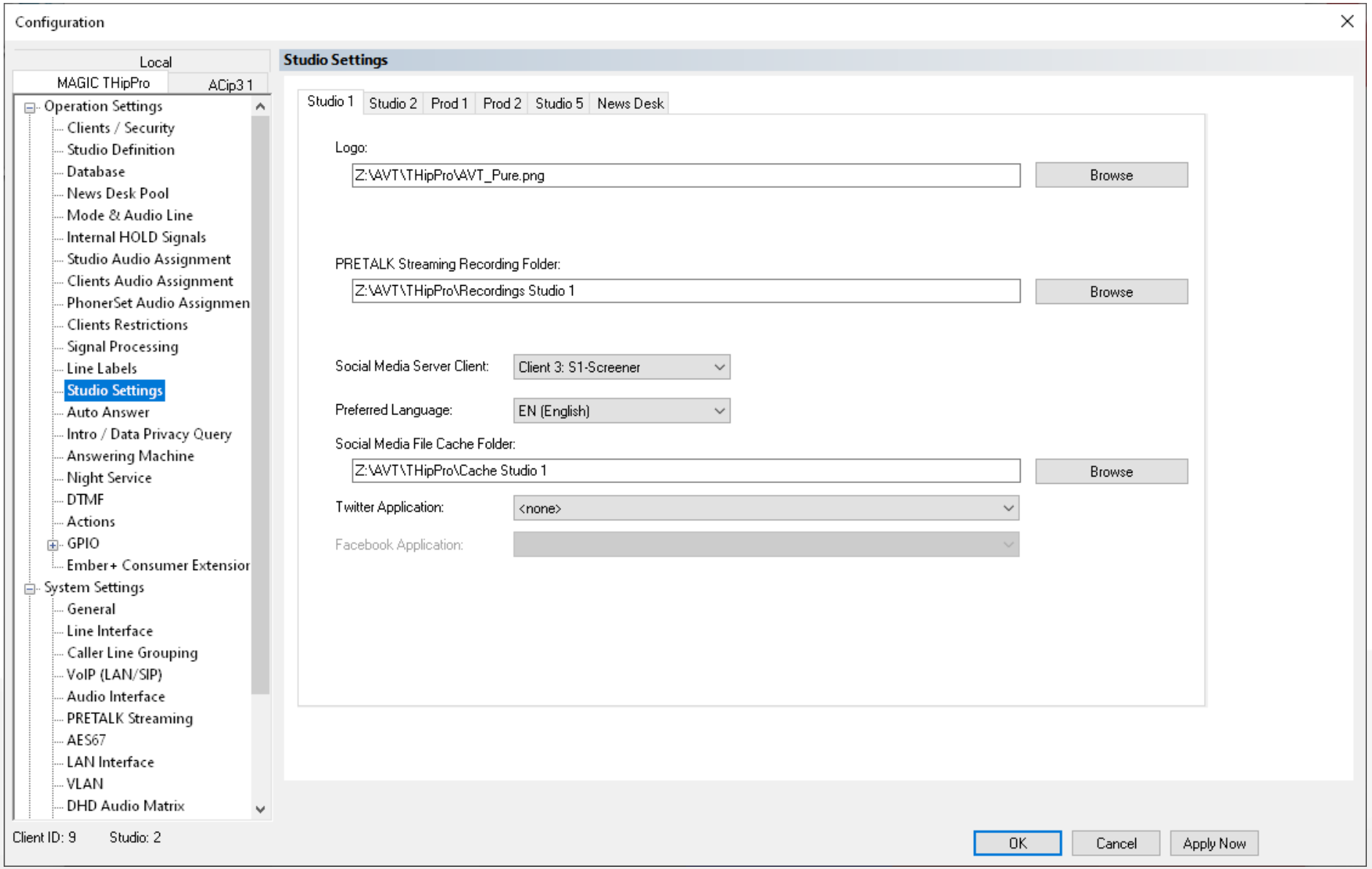
Signal Processing (5)



Line Labels (1)

- Define the labels on all telephone lines displayed on the main panel of the PC software on the LINE LABELS page.
- LINE: Shows the line numbers of telephone lines and ACconnect channels connected to the system.
- LABEL: Enter any text. You could also mix text with the supported variables:
  - {index}: Line index
  - **{lineid}**: telephone number derived from the line interface settings.
    - VoIP: SIP User as defined on the VoIP (LAN / SIP) configuration page.
    - ISDN: MSN as defined on the MSN configuration page.
    - POTS: Phone number as defined on the POTS Phone Numbers configuration page.
  - **{grp}**: Name of the line group the telephone line is part of.
  - **{sipsrv}**: Only in VoIP mode. SIP server name / address currently used.
  - {sipsrv#}: Only in VoIP mode. 1 if the main SIP server is currently used. 2 if the backup SIP server is currently used.
  - **{sipaut}**: Only in VoIP mode. SIP authentication as defined on the VoIP (LAN / SIP) configuration page.
  - **{sipdisp}**: Only in VoIP mode. SIP display name as defined on the VoIP (LAN / SIP) configuration page.
  - The result of variables in **bold** can be modified:
    - {...:#}: Use only the last # characters. (e.g. {lineid:4})
    - {...:-#}: Use only the first # characters.

Line Labels (2)



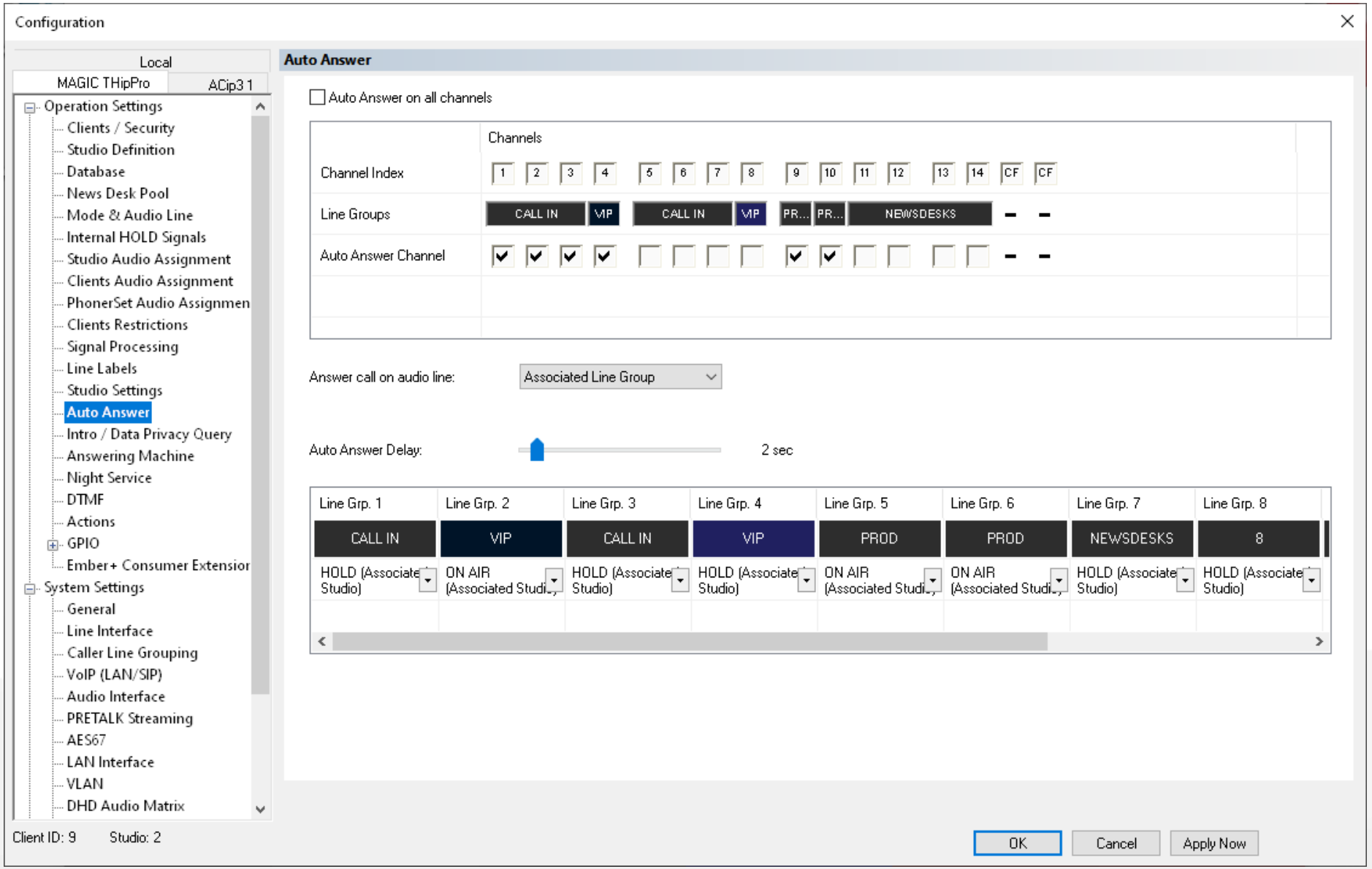
Studio Settings (1)

- Define studio-oriented features on the STUDIO SETTINGS page.
- There is a tab for each studio.
- All clients of a studio need read and write access to the folders configured on this page.
- LOGO: Define the logo is displayed in the top right corner of the LAN Client and Screener Client PC software. If a user switches to another studio, the logo changes as well. If the logo cannot be found, each PC software client displays the logo defined in its local settings.
- PRETALK STREAMING RECORDING FOLDER: Define a central folder for all recordings made via Pretalk Streaming in this studio.
  - When CONTENT FILTERS are active the software stores the recordings in separate subfolders for each user login (1-16).
  - It is recommended to delete files that are no longer needed, as the PC software monitors the folder to display all available recordings in the RECORDINGS list. A large folder slows down the software significantly.
- SOCIAL MEDIA SERVER CLIENT: A PC running the Screener Client PC software acts as social media server. The server connects to the social media service such as twitter and provides the other clients with social media content. The dedicated Screener Client should not be used for other purposes since downloading a lot of media files may block the Screener client PC software for some time.

Studio Settings (2)

- PREFERRED LANGUAGE: Define the default language for searching the social network. The language can be changed for individual searches in the search mask.
- SOCIAL MEDIA CACHE FOLDER: Define a folder to store pictures and other media. The cache provides fast access to these files.
- TWITTER APPLICATION: Select your Twitter application which provides access to the social network. The application must be created via the Local Settings of the Screener Client PC software.
- FACEBOOK APPLICATION: Not supported now.

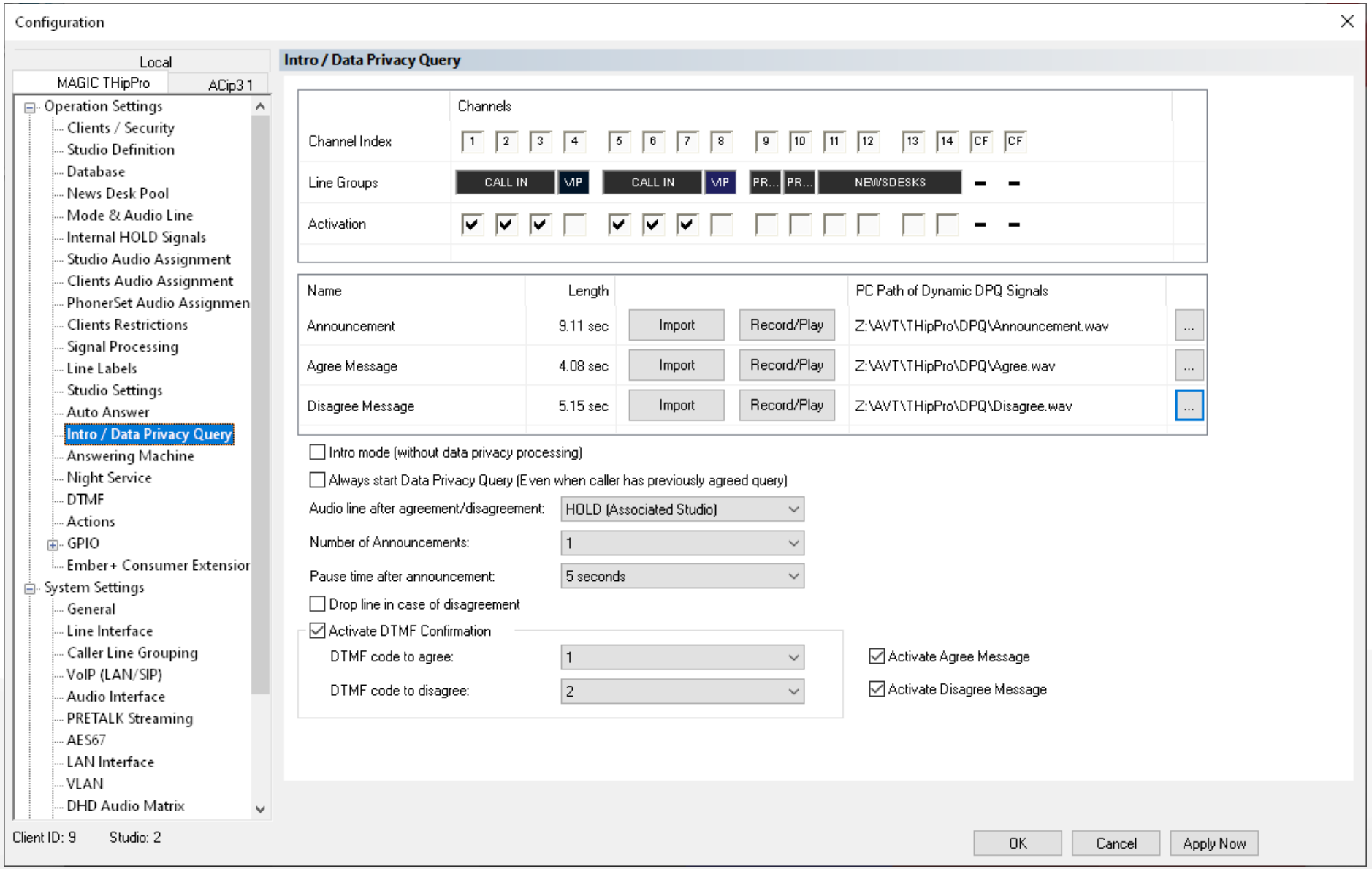
Studio Settings (3)



Auto Answer (1)

- Define how the system accepts incoming calls automatically on the AUTO ANSWER page.
- AUTO ANSWER ON ALL CHANNELS: Select to activate the feature on all telephone lines.
- AUTO ANSWER CHANNEL: Enable auto answer on individual channels. The line groups are displayed for better overview.
- ANSWER CALL ON AUDIO LINE: Define the audio line which is set for the telephone line when a call was answered automatically.
  - ASSOCIATED LINE GROUP: Define an individual audio line for each line group in the table at the bottom of the page.
  - HOLD (ASSOCIATED STUDIO): Use the Hold signal of the first studio the line is assigned to.
  - HOLD (NEWS DESK CLIENT): Use the Hold signal of the News Desk Client as configured on the Clients Audio Assignment page.
  - HOLD (STUDIO N): Use the Hold signal of a specific studio.
  - OFF CONFERENCE N: Use one of the Off Conference audio lines.
  - ON AIR (ASSOCIATED STUDIO): Use the audio line of On-Air fader 1 of the first studio the line is assigned to.
  - ON AIR N: Use a specific On-Air audio line.
  - PHONERSET N PRETALK: Use a specific PhonerSet pretalk audio line.
  - PRETALK N: Use specific Pretalk audio line.
- AUTO ANSWER DELAY: Define how long a call must ring before the system accepts the call. During that time the call can be answered manually by the user.

Auto Answer (2)



Intro / Data Privacy Query (1)

- Define how messages to callers are automatically played back before the call is signalled in the PC software on the INTRO / DATA PRIVACY QUERY page.
- The data protection regulations raised the demand for mechanisms to inform callers about how their data is used and to obtain their consent to the use of the data.
- When this feature is activated, incoming calls are answered automatically by the MAGIC THipPro.
- The caller’s data (phone number, name if available, etc.) is displayed on the line.
- The HOLD button shows a symbol which message is currently playing. The other audio line buttons are deactivated. Press the HOLD button to stop the message and accept the call right away.
- After the Intro / Data privacy query process is done all audio line buttons are blinking yellow. The caller hears the configured Hold signal.
- If a caller disagrees to consent by pressing a key on his or her phone the system can hang up automatically.
- The caller's decision is stored in the phone book database to
  - prevent the callers from hearing the announcement the next time they call.
  - be able to delete the caller’s records via an SQL script manually or via the windows scheduler. (Find an example in the installation directory of the MAGIC Screener software under .\SQL User Script.

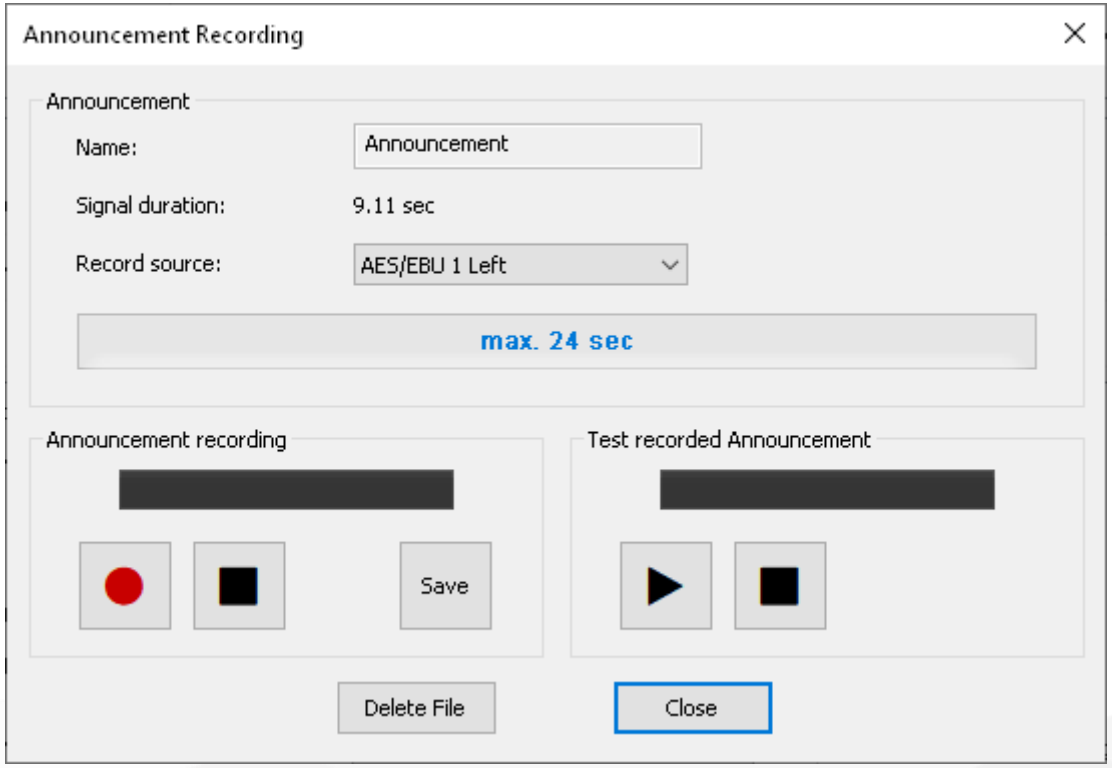
Intro / Data Privacy Query (2)

- Several scenarios are possible e.g.:
  - **Intro only**: The system plays the intro and then signals the incoming call. No decision is stored.
  - **Wait for consent**: The system plays the intro and advises the callers to hang up if they do not agree. The data privacy field of the caller's phone book database record is set to "agreed" if the caller stays on the line.
  - **Query consent**: The system plays the intro which advises the callers to press a button on their phone if they agree or press a different button if they disagree. The decision is stored in the data privacy field of the caller's phone book database record.
- ACTIVATION: This feature can only be activated or deactivated for all lines of a line group.
- MESSAGES: Three different messages can be stored on the system:
  - ANNOUNCEMENT: The message that a caller hears after the MAGIC THipPro has answered the call.
  - AGREE MESSAGE: The message that a caller hears before the call is signalled in the PC software.
  - DISAGREE MESSAGE: The message that a caller hears after they pressed the button that tells the system that they disagree.

Intro / Data Privacy Query (3)

- The message are configured in the table of DPQ signals:
  - NAME: The names are predefined an cannot be changed.
  - LENGTH: Length of the stored audio file in seconds.
  - IMPORT: You can import an audio file. Only the first 24 seconds of the audio file are imported. The import module supports WAVE and MP3 audio files. They are automatically converted to a mono file with 16 kHz sampling frequency.
  - RECORD/PLAY: Opens a window to record, play and delete a message file. (See next page for details.)
  - PC PATH OF DYNAMIC DPQ SIGNALS: Enter the path of a DPQ message file stored on the PC or a network drive. The PC software then imports the file. The PC software on the PC which serves as master checks if the file has changed once per minute and automatically updates the DPQ message if necessary.
    - Note: A path can only be entered if a static DPQ message is already recorded or imported. This file serves as a fallback if there is a problem with importing the file from the specified path.

Intro / Data Privacy Query (4)



Intro / Data Privacy Query (5)

- Use the RECORD/PLAY button on the INTRO / DATA PRIVACY QUERY page to open the DPQ MESSAGE RECORDING window.
- NAME: The names are predefined an cannot be changed.
- SIGNAL DURATION: Length of the currently stored DPQ message file.
- RECORD SOURCE: Select an audio interface of the MAGIC THipPro. You can choose from:
  - All Analogue Audio interfaces
  - All AES/EBU channels
  - All AES67 channels
  - All DANTE channels
- PROGRESS BAR: Shows the length of the DPQ message being recorded.

- MESSAGE RECORDING: Control the recording of a DPQ message:
  - LEVEL METER: Shows the level of the audio signal on the selected Record Source.
  - RECORD BUTTON: Starts recording.
  - STOP BUTTON: Stops recording
  - SAVE: Stores the file on the MAGIC THipPro.
- TEST RECORDED DPQ message
  - LEVEL METER: Level of the recording being played back.
  - PLAY BUTTON: Playback of the recording.
- DELETE FILE: Delete the DPQ message file from the MAGIC THipPro

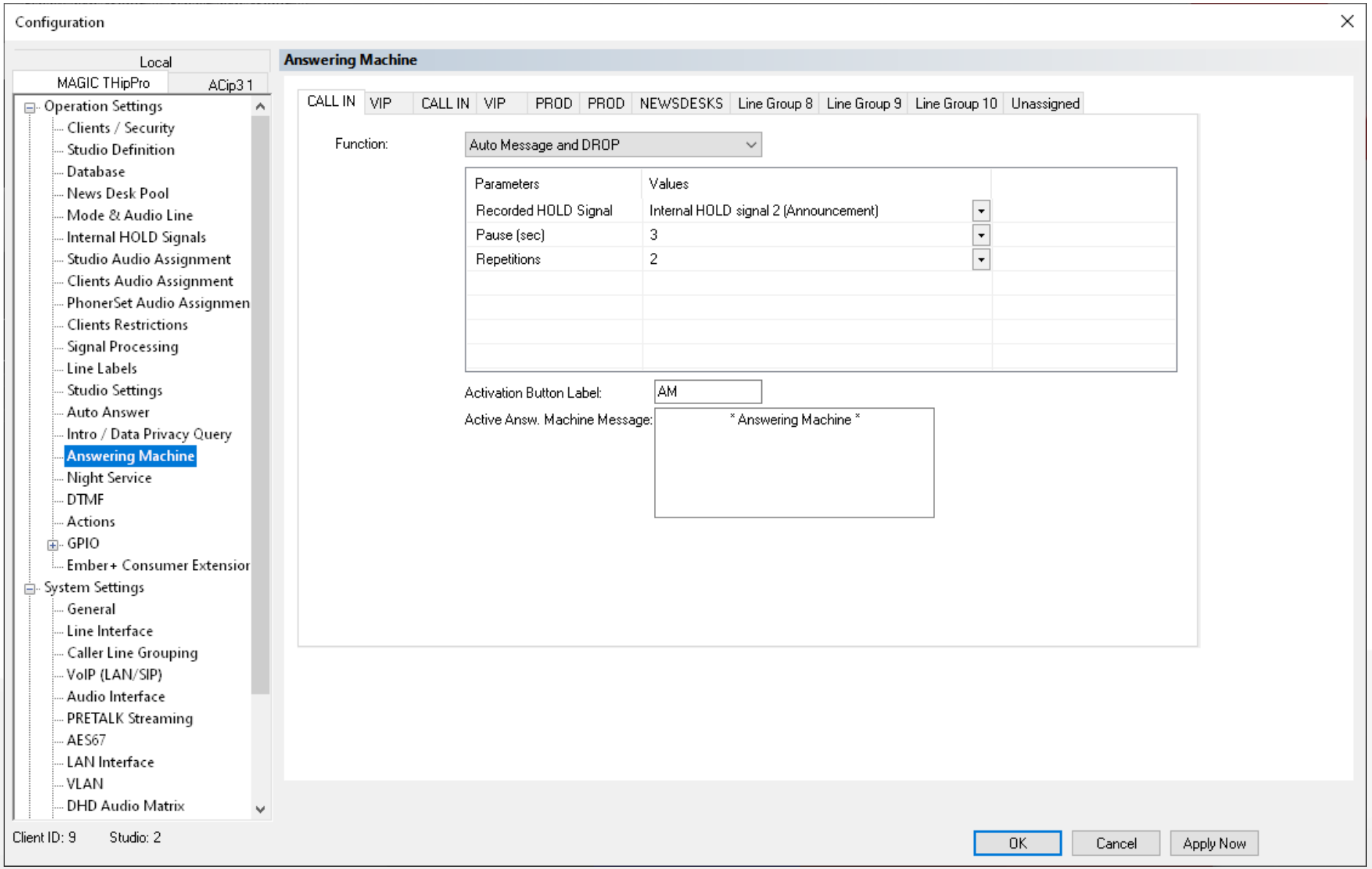
Intro / Data Privacy Query (6)

- INTRO MODE (WITHOUT DATA PRIVACY PROCESSING): The MAGIC THipPro accepts the calls automatically and plays the Announcement message. The data privacy entry in the phone book database is not set.
- ALWAYS START DATA PRIVACY QUERY (EVEN WHEN CALLER HAS PREVIOUSLY AGREED QUERY): The system ignores the data privacy entry in the phone book database when a call comes in and plays the announcement message every time.
- AUDIO LINE AFTER INTRO: Define the Hold signal the caller hears after the Intro / Data Privacy Query process is done.
  - HOLD (STUDIO N): The Hold signal of a studio.
  - HOLD (NEWS DESK CLIENT): The Hold signal configured for the News Desk Clients on the Clients Audio Assignment configuration page.
  - HOLD (ASSOCIATED STUDIO): The Hold signal of the first studio to which the respective telephone line is assigned to.
- NUMBER OF ANNOUNCEMENTS: Define how many times the announcement should be repeated. (1 – 4)
- PAUSE TIME AFTER ANNOUNCEMENT: Define how long the pause after each announcement message should be. (0 – 10 seconds)
- DROP LINE IN CASE OF DISAGREEMENT: Enable if the MAGIC THipPro should disconnect the line when the disagree-DTMF code was received.

Intro / Data Privacy Query (7)

- ACTIVATE DTMF CONFIRMATION: The MAGIC THipPro can detect which button the caller pressed on the phone by analysing the received DTMF tones. Enable this function to use the DTMF codes to update the data privacy field of the caller's phone book database record automatically.
  - DTMF CODE TO AGREE: Define the DTMF code that the callers enter when they agree to the storing of their data.
  - DTMF CODE TO AGREE: Define the DTMF code that the callers enter when they agree to the storing of their data.
- ACTIVATE AGREE MESSAGE: Enable to play the agree message. The agree message is played when:
  - The caller stays on the line after the Pause time after announcement.
  - The caller sent the DTMF code to agree and DTMF CONFIRMATION is activated.
- ACTIVATE DISAGREE MESSAGE: Enable to play the disagree message. The Disagree message is played when:
  - the caller sent the DTMF code to disagree and DTMF CONFIRMATION is activated.

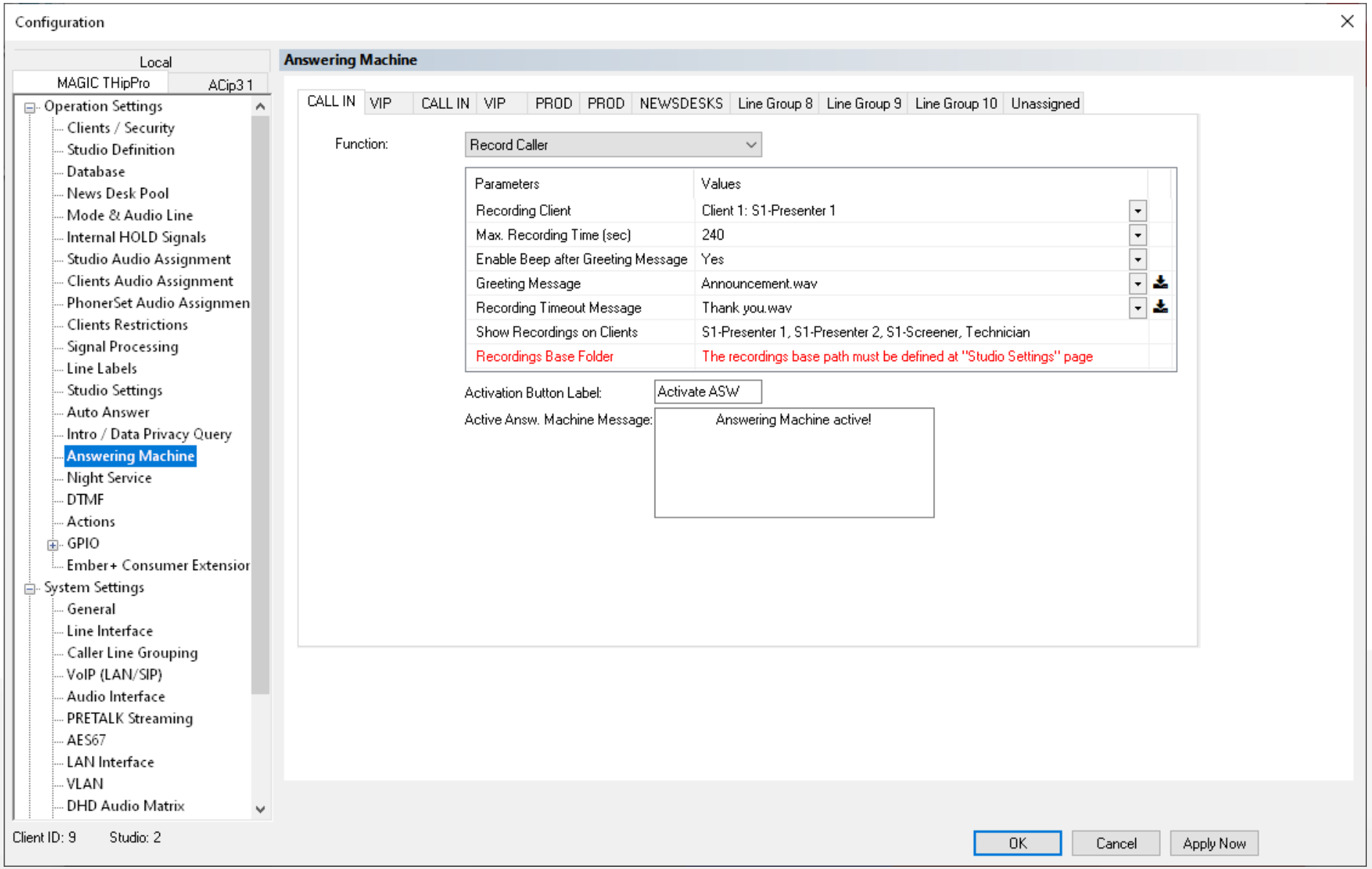
Intro / Data Privacy Query (8)



Answering Machine (1)

- Configure the Answering Machine mode and parameters on the ANSWERING MACHINE page.
- The answering machine is configured and activated per line group.
- Activate the answering machine via the line group menu of the PC software's menu bar.
- Configure the answering machine for each line group individually on the respective tab.
- FUNCTION: Select a mode:
  - NO ANSWERING MACHINE OPERATION.
  - AUTO MESSAGE AND DROP: Every call on any line of the line group is automatically accepted. The MAGIC THipPro plays a message and disconnects the call thereafter.
  - RECORD CALLER: The MAGIC THipPro accepts incoming calls automatically. The system plays a message and streams the caller's audio signal to a PC via Pretalk Streaming. The PC records the caller's message.
- AUTO MESSAGE AND DROP parameters:
  - RECORDED HOLD SIGNAL: Select a recorded Hold signal from the list. Configure the Hold signal files on the INTERNAL HOLD SIGNALS configuration page.
  - PAUSE (sec): Define the pause after each repetition of the Hold signal.
  - REPETITIONS: Define how many times the Hold signal is played before the MAGIC THipPro hangs up.
  - ACTIVATION BUTTON LABEL: Define the label of the button which is used to activate the answering machine. The button is displayed in the respective line group menu of the PC software's menu bar.
  - ACTIVE ANSW. MACHINE MESSAGE: Define the message that is displayed on those telephone lines in the PC software where the answering machine is active.

Answering Machine (2)



Answering Machine (3)

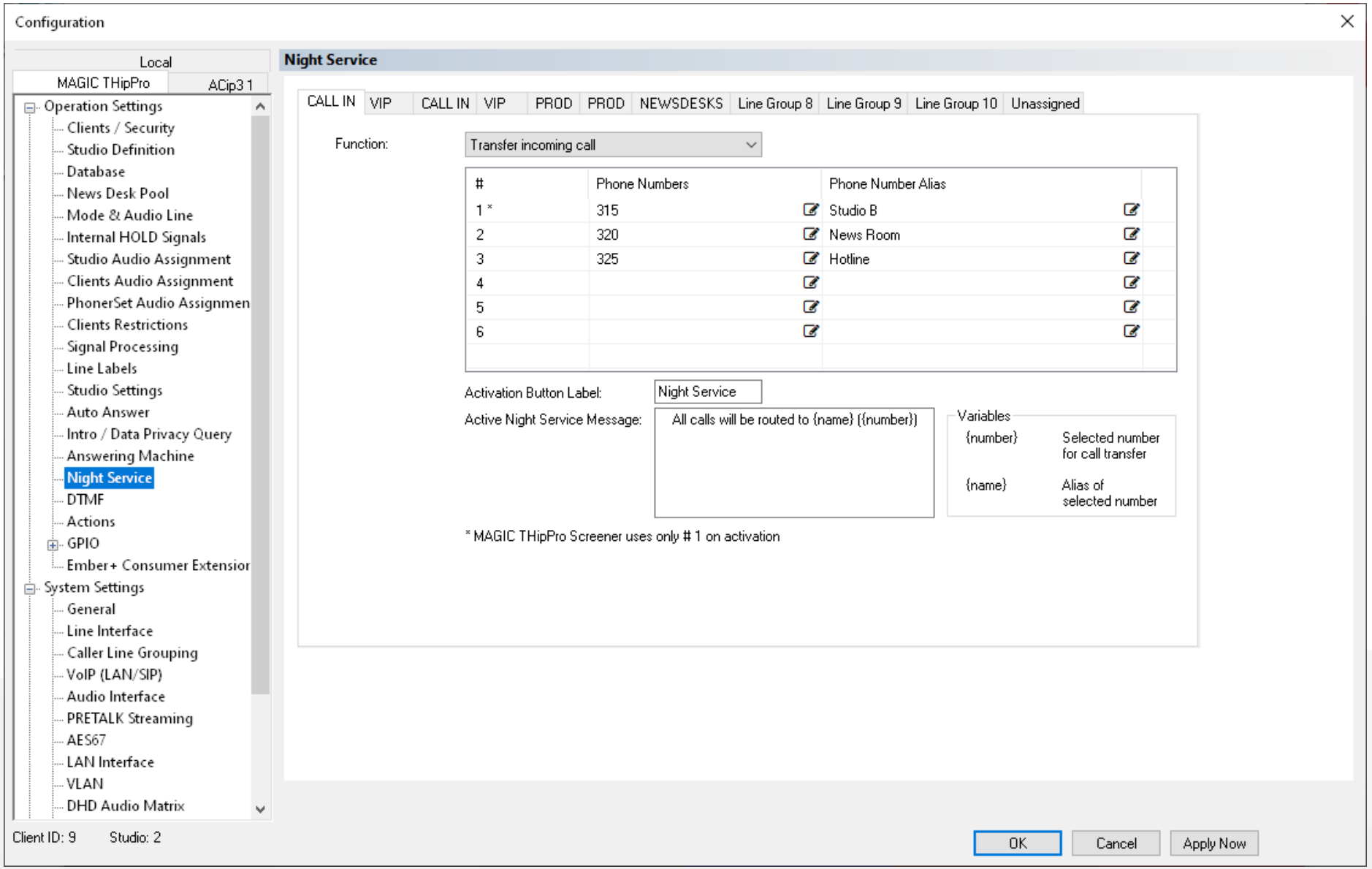
- RECORD CALLER parameters:
  - RECORDING CLIENT: Select a PC client. It plays the greeting and timeout messages and does the recording of the caller.
    There must be a pretalk stream assigned to the client which is used for audio transmission. You may assign a fixed pretalk stream or a dynamic pretalk stream.
    The pretalk stream of this client is reserved for recording of callers when the answering machine is active. The user can not talk to callers on other lines using pretalk.
  - MAX. RECORDING TIME (SEC): Set the timeout after which the answering machine will hang up automatically. Select 0 to only play the message without recording a message.
  - ENABLE BEEP AFTER GREETING MESSAGE: The answering machine will play a beep tone after the greeting message to indicate that it is ready to record a message.
  - GREETING MESSAGE: Click on the input field to select a greeting message. The message is played directly after the system accepted the call.
    The message files must be stored in a specific folder to show up here. The path is determined by the name of the LINE GROUP and the RECORDINGS BASE FOLDER:
    <Recordings Base Folder>\<Line Group Folder>\Messages.
    The folder is automatically created when importing a message via the icon on the right.
    The file format is WAV, 16 Bit, 48 kHz, Mono.
  - RECORDING TIMEOUT MESSAGE: Click on the input field to select a timeout message. The message is played after the max. recording time exceeded, before the system hangs up.
    The message files must be stored in a specific folder to show up here. The path is determined by the name of the LINE GROUP and the RECORDINGS BASE FOLDER:
    <Recordings Base Folder>\<Line Group Folder>\Messages.
    The folder is automatically created when importing a message via the icon on the right.
    The file format is WAV, 16 Bit, 48 kHz, Mono.

Answering Machine (4)

- RECORDINGS BASE FOLDER: The studio recording folder is used as the recording base folder. Configure the folder under STUDIO SETTINGS – PRETALK STREAMING RECORDING FOLDER.
- ACTIVATION BUTTON LABEL: Define the label of the button which is used to activate the answering machine. The button is displayed in the respective line group menu of the PC software's menu bar.
- ACTIVE ANSW. MACHINE MESSAGE: Define the message that is displayed on those telephone lines in the PC software where the answering machine is active.

- It is recommended to delete recordings that are no longer needed, as the PC software monitors the folder to display all available recordings in the RECORDINGS list. A large folder slows down the software significantly.

Answering Machine (5)



Night Service (1)

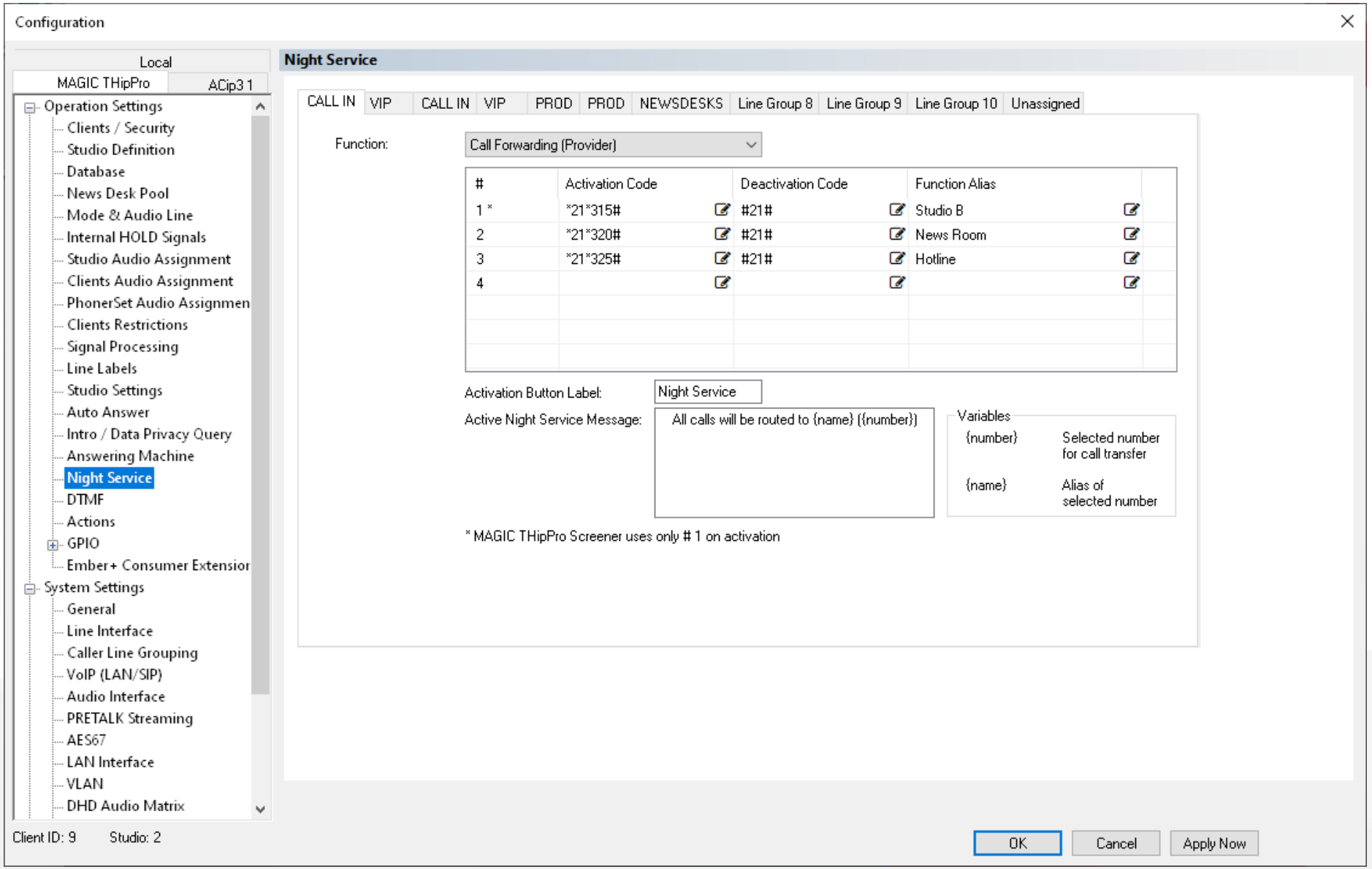
- Configure the Night Service mode and parameters on the NIGHT SERVICE page.
- When night service is activated, all incoming calls are forwarded to another telephone.
- Up to six different call forwarding destinations can be defined.
- The night service mode is configured and activated per line group.
- Activate the night service via the line group menu of the PC software's menu bar. If several phone numbers are configured the user can chose a number.
- When the night service is activated, the respective telephone lines on the main panel of the PC software are disabled, and a message is displayed.
- Configure the night service for each line group individually on the respective tab.

- FUNCTION: Select a mode:
  - NO NIGHT SERVICE OPERATION.
  - TRANSFER INCOMING CALL: Every incoming call is transferred using ECT (Call forwarding by PBX or provider, which is widely supported)
  - CALL FORWARDING INCOMING CALL: Every incoming call is transferred using the call forwarding lines of the MAGIC THipPro. (There must be CALL FORWARDING LINES defined on the LINE INTERFACE configuration page)
  - CALL FORWARDING PROVIDER: The MAGIC THipPro sends a dial code to the provider when Night Service is activated. The command instructs the network to route the call to the desired number. When the night service is deactivated the MAGIC THipPro sends another dial code to the provider to deactivate the call forwarding.

Night Service (2)

- TRANSFER INCOMING CALL / CALL FORWARDING INCOMING CALL parameters:
  - #: Six different call forwarding destinations can be defined. Only the first destination can be used by the Screener Client PC software.
  - PHONE NUMBERS: Define the call forwarding destinations.
  - PHONE NUMBER ALIAS: Enter a short text explaining the destination. It will be presented to the user when selecting a destination and can be used in the night service message.
- GENERAL parameters:
  - ACTIVATION BUTTON LABEL: Define the label of the button in the line group menu of the PC software's menu bar.
  - ACTIVE NIGHT SERVICE MESSAGE: Define the message that is displayed on those telephone lines in the PC software where the night service is active. You may enter any text. You may mix text with the supported variables:
    - {number}: The destination phone number.
    - {name}: The phone number alias of the destination.

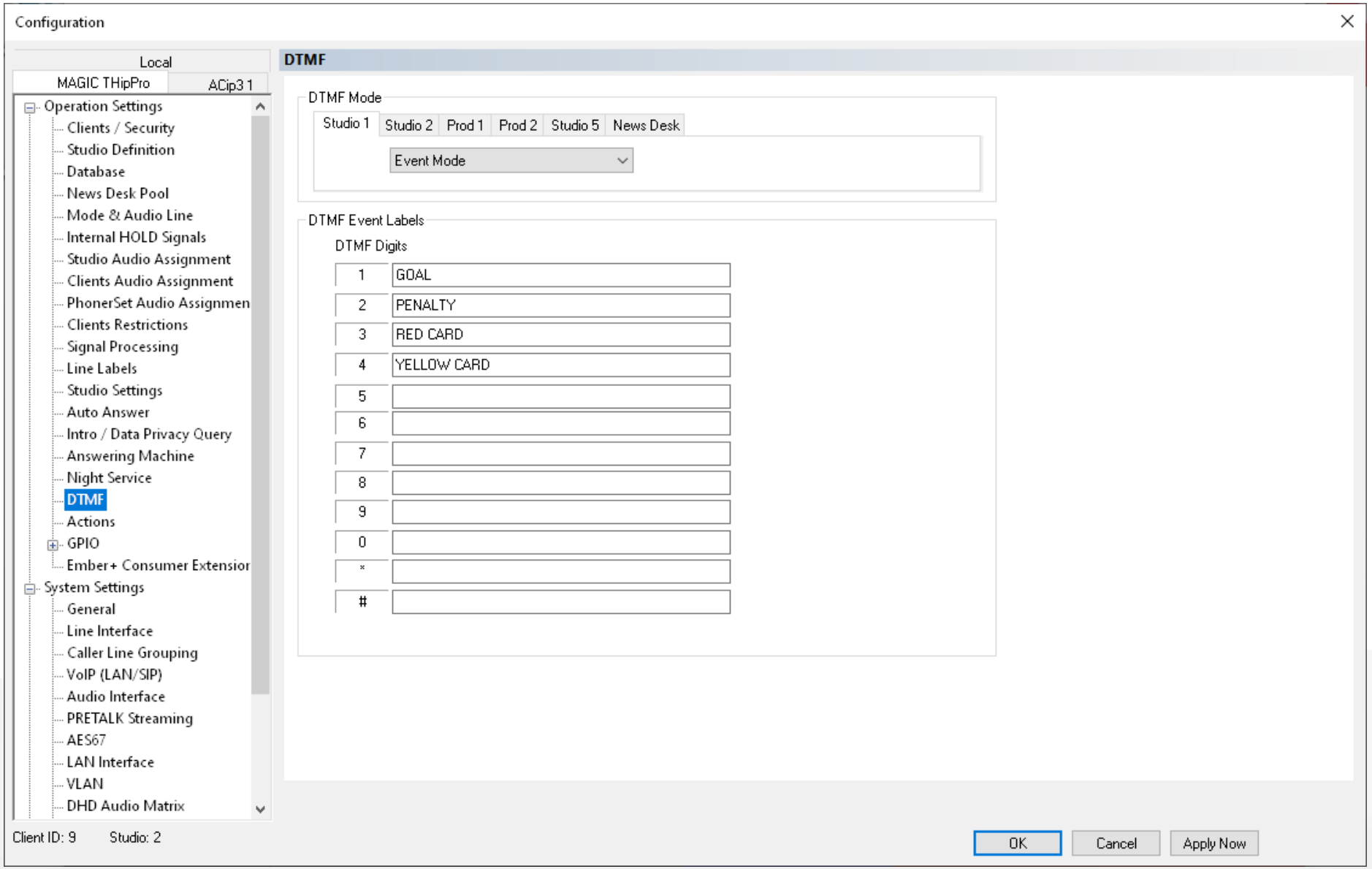
Night Service (3)



Night Service (4)

- CALL FORWARDING PROVIDER parameters:
  - #: Four different dial codes can be defined. Only the first dial code can be used by the Screener Client PC software.
  - ACTIVATION CODE: Define the dial code to activate the call forwarding. The dial code must include the destination phone number.
  - DEACTIVATION CODE: Define the dial code to deactivate the call forwarding.
  - FUNCTION ALIAS: Enter a short text explaining the destination. It will be presented to the user when selecting a destination and can be used in the night service message.

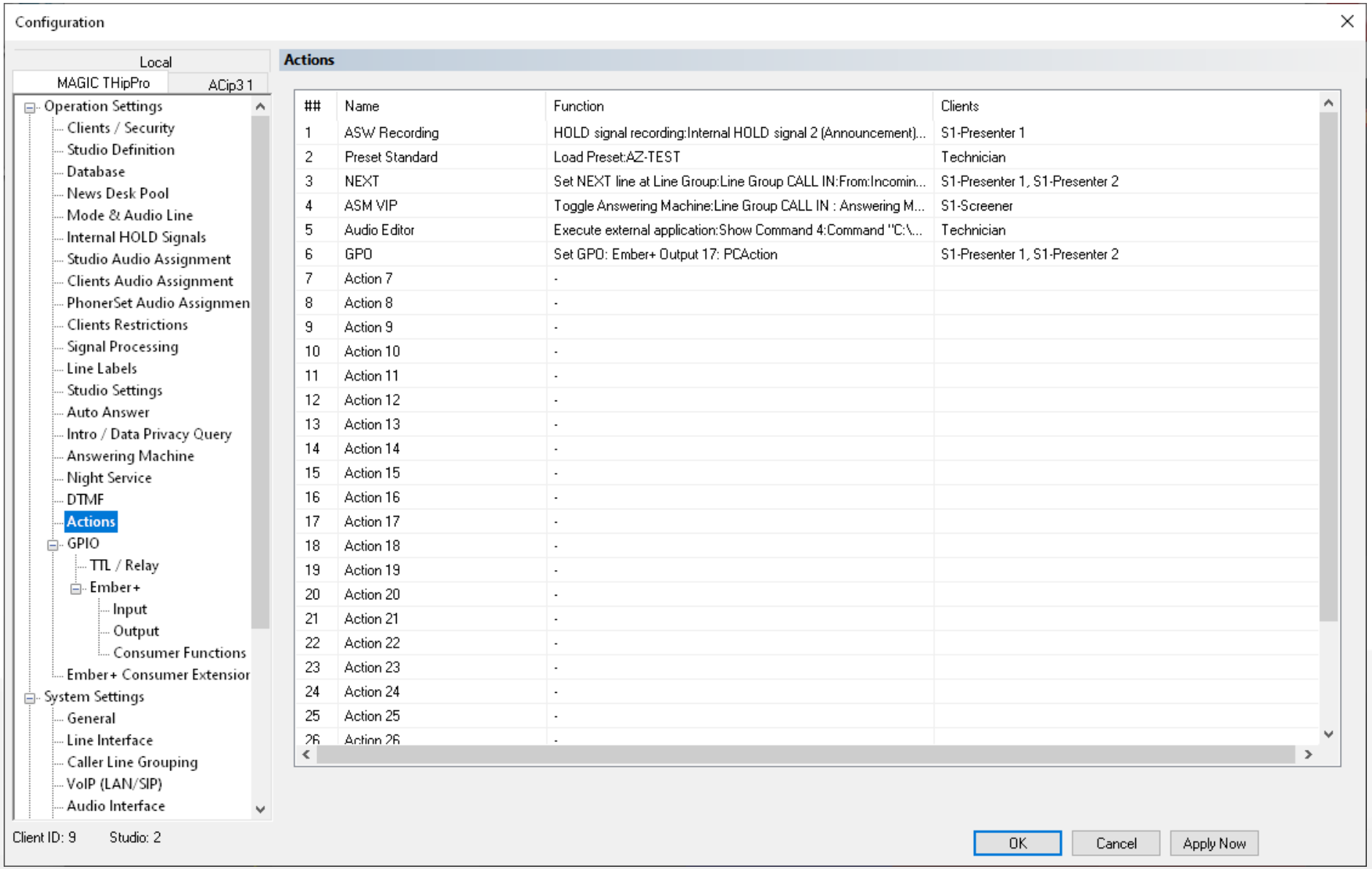
Night Service (5)


Configuration
Local
MAGIC THipPro
ACip3 1
Operation Settings
Clients / Security
Studio Definition
Database
News Desk Pool
Mode & Audio Line
Internal HOLD Signals
Studio Audio Assignment
Clients Audio Assignment
PhonerSet Audio Assignmen
Clients Restrictions
Signal Processing
Line Labels
Studio Settings
Auto Answer
Intro / Data Privacy Query
Answering Machine
Night Service
DTMF
Actions
GPIO
Ember+ Consumer Extensior
System Settings
General
Line Interface
Caller Line Grouping
VoIP (LAN/SIP)
Audio Interface
PRETALK Streaming
AES67
LAN Interface
VLAN
DHD Audio Matrix
Client ID: 9
Studio: 2
DTMF
DTMF Mode
Studio 1
Studio 2
Prod 1
Prod 2
Studio 5
News Desk
Event Mode
DTMF Event Labels
DTMF Digits
1 GOAL
2 PENALTY
3 RED CARD
4 YELLOW CARD
5
6
7
8
9
0
*
#
OK
Cancel
Apply Now

DTMF (1)

- Configure how the MAGIC THipPro LAN Client PC software handles DTMF tones the system receives on the DTMF page.
- DTMF (Dual-tone multi-frequency) tones are sent when a caller presses a button (0-9, *,#) on his or her phone. The information is transmitted as a short audio signal which can be detected by the MAGIC THipPro.
- The MAGIC THipPro can also detect signals transmitted via RFC2833 in VoIP mode.
- The DTMF mode is configured per line group.
- Configure the DTMF mode for each studio individually on the respective tab.
- When DTMF reception is active the RESET DTMF button is displayed in the LAN Client PC software. It clears all DTMF tone displays.
- Select a mode:
  - OFF: Received DTMF tones are not displayed.
  - STANDARD: Every received DTMF tone is displayed on the telephone line it was received as a singled digit until the next DTMF tone is received or the line is disconnected.
  - GAME SHOW: On each line only the first received DTMF tone is displayed as a single digit. The first received DTMF tone of all lines is displayed on a green background to indicate who pressed a button first. The DTMF display is reset when the call is disconnected or RESET DTMF is pressed.
  - EVENT MODE: In this mode a text can be assigned to each DTMF code. When a DTMF tone is received the LAN Client PC software displays the text instead of the digit. The text is displayed for five seconds.
    This comes handy for example when there are reporters in different sports arenas. The operator in the studio has them all on Hold. The reporters signal an event to the studio via DTMF which is displayed as text.

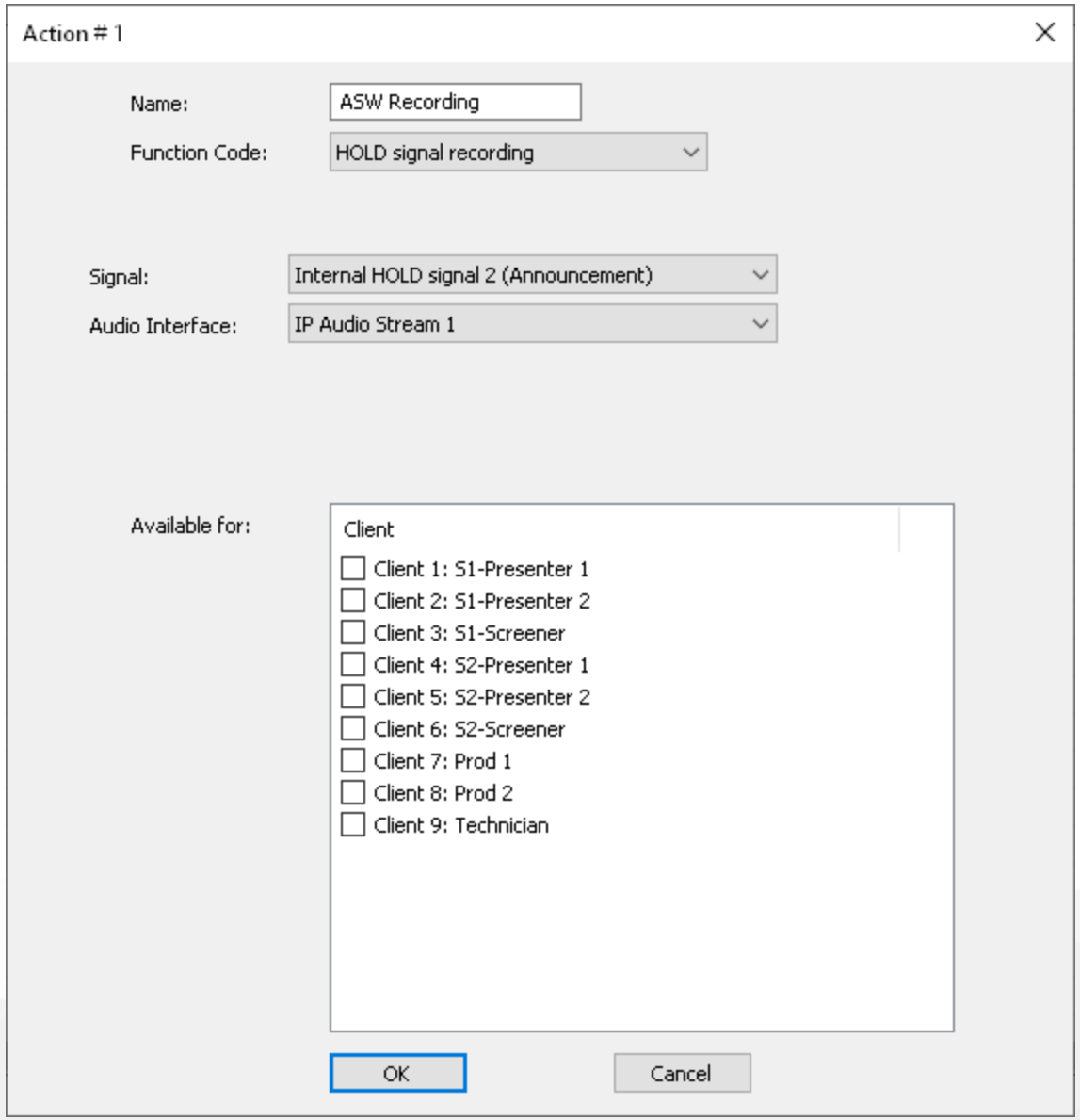
DTMF (2)


Configuration
Local
MAGIC THipPro
ACip3 1
Operation Settings
Clients / Security
Studio Definition
Database
News Desk Pool
Mode & Audio Line
Internal HOLD Signals
Studio Audio Assignment
Clients Audio Assignment
PhonerSet Audio Assignmen
Clients Restrictions
Signal Processing
Line Labels
Studio Settings
Auto Answer
Intro / Data Privacy Query
Answering Machine
Night Service
DTMF
Actions
GPIO
TTL / Relay
Ember+
Input
Output
Consumer Functions
Ember+ Consumer Extensior
System Settings
General
Line Interface
Caller Line Grouping
VoIP (LAN/SIP)
Audio Interface
Client ID: 9
Studio: 2
Actions
Name Function Clients
1 ASW Recording HOLD signal recording:Internal HOLD signal 2 (Announcement)... S1-Presenter 1
2 Preset Standard Load Preset:AZ-TEST Technician
3 NEXT Set NEXT line at Line Group:Line Group CALL IN:From:Incomin... S1-Presenter 1, S1-Presenter 2
4 ASM VIP Toggle Answering Machine:Line Group CALL IN : Answering M... S1-Screener
5 Audio Editor Execute external application:Show Command 4:Command "C:\... Technician
6 GPO Set GPO: Ember+ Output 17: PCAction S1-Presenter 1, S1-Presenter 2
7 Action 7 -
8 Action 8 -
9 Action 9 -
10 Action 10 -
11 Action 11 -
12 Action 12 -
13 Action 13 -
14 Action 14 -
15 Action 15 -
16 Action 16 -
17 Action 17 -
18 Action 18 -
19 Action 19 -
20 Action 20 -
21 Action 21 -
22 Action 22 -
23 Action 23 -
24 Action 24 -
25 Action 25 -
26 Action 26 -
OK
Cancel
Apply Now

Actions (1)

- Assign functions to additional buttons on the menu bar of the PC software on the ACTIONS page.
- Up to 30 actions can be defined.
- Specify which clients display the additional buttons.
- The NEXT action button is always displayed separately on the menu bar. All other action buttons can be displayed under a general ACTIONS button.
- An overview of the specified actions is displayed in a table:
  - NAME: A name of your choice.
  - FUNCTION: Summary of the specified action.
  - CLIENTS: Lists all clients which display a button to execute the action.

Actions (2)


Action # 1
Name:
ASW Recording
Function Code:
HOLD signal recording
Signal:
Internal HOLD signal 2 (Announcement)
Audio Interface:
IP Audio Stream 1
Available for:
Client
Client 1: S1-Presenter 1
Client 2: S1-Presenter 2
Client 3: S1-Screener
Client 4: S2-Presenter 1
Client 5: S2-Presenter 2
Client 6: S2-Screener
Client 7: Prod 1
Client 8: Prod 2
Client 9: Technician
OK
Cancel

Actions (3)

- Double click a line on the ACTIONS configuration page to open a window to add / edit / delete an action.
- NAME: Enter a name of your choice.
- FUNCTION CODE: Select a function from the drop-down list. Find a detailed description of all function codes on the following pages.
- PARAMETERS: The available parameters depend on the selected function code. Find a detailed description of all parameters on the following pages.
- AVAILABLE FOR: Select the clients where the action should be available.

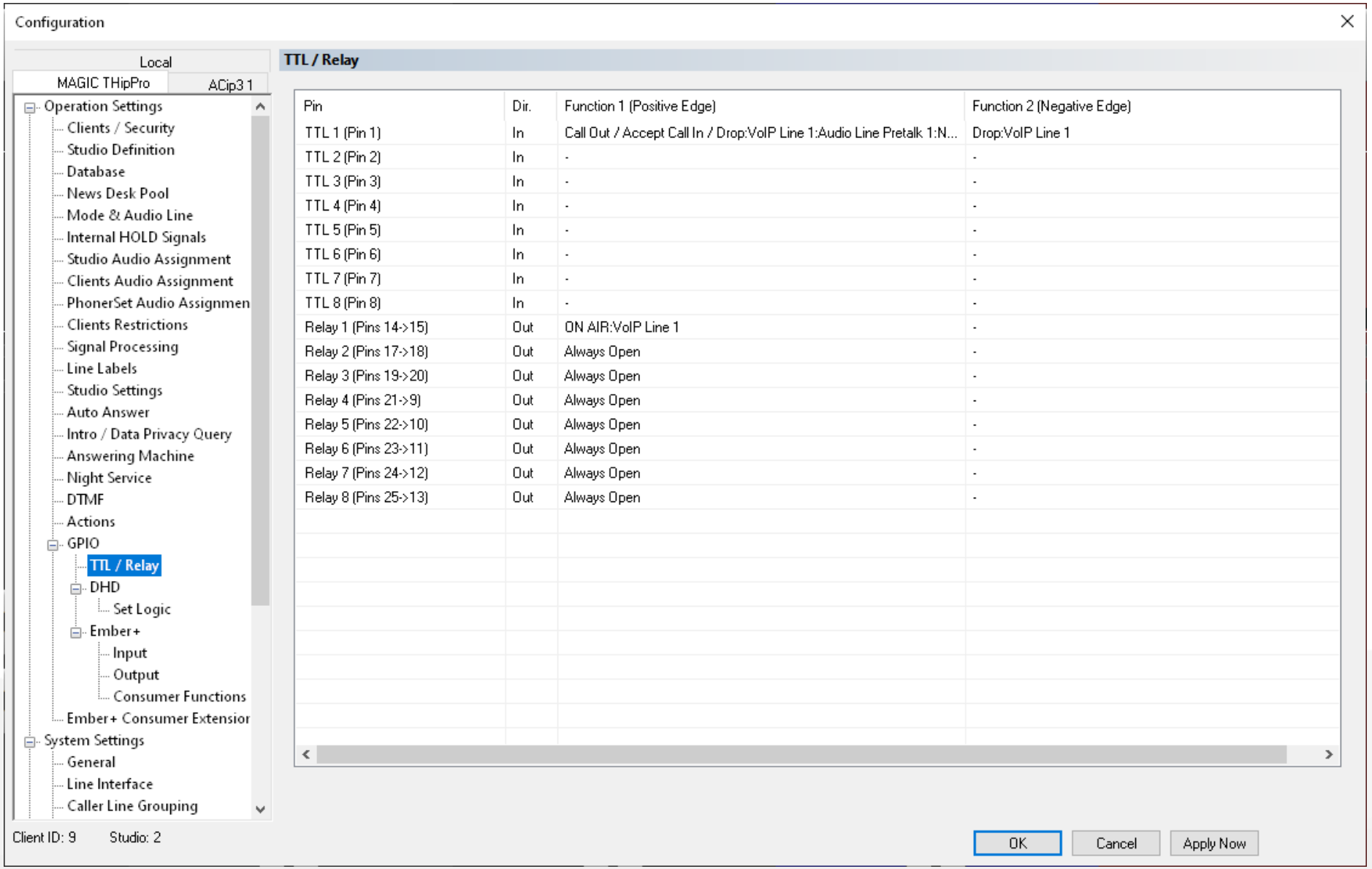
Actions (4)

Function Code	Parameter	Description
-	-	No function selected. Set this function code to delete a function.
Load Preset	Preset: #: <Preset/Super Preset Name>	Loads the Preset (Operation Settings) with the name #. Loads the Super Preset (Operation & System Settings) with the name #.
HOLD signal recording	Signal: IH: Internal HOLD Signal 1…16 Audio Interface: AI: Audio Interface	Opens a window for recording the internal HOLD Signal IH via the audio interface AI.
Set NEXT line at Line Group	Line Group: GR: Configured Line Group From: F: Incoming Call, Any HOLD, Any HOLD READY, Any HOLD WAS ON AIR To: T: My PRETALK, My ON AIR Post State: PO: My HOLD, My HOLD READY, My PRETALK, DROP line	Allows for automatically bringing the next caller ON AIR by only pressing the action button. The action button only affects lines of the line group GR. The action button only affects calls which are in state F. If a call meets these conditions, clicking the action button will put the call in the state T. If there was a call in state T before, this call is put into post state PO. "My" indicates that the specified audio line of the client which executes the action is used.

Actions (5)

Function Code	Parameter	Description
Execute External Application	Show Command: SC: Hide Window, Show Window (and set active), Show Window, Show Window minimized Command: C: Path and command line parameters	Runs an external application given in C and sets the window mode of the application as configured in SC.
Set GPO	GPO: G: General Purpose Output (TTL, Relay, DHD SetLogic, Ember+)	Toggles the output specified in G. An output must be configured to SET OUTPUT BY ACTION (PC) on the respective GPIO configuration page to be available here.
Toggle Answering Machine	Line Group: GR: Configured Line Group Mode: M: Configured Answering Machine Mode	Switches the configured answering machine mode M for the line group GR on and off.

Actions (6)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MAGIC THipPro
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Database
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Studio Audio Assignment
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Clients Restrictions
Signal Processing
Line Labels
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Auto Answer
Intro / Data Privacy Query
Answering Machine
Night Service
DTMF
Actions
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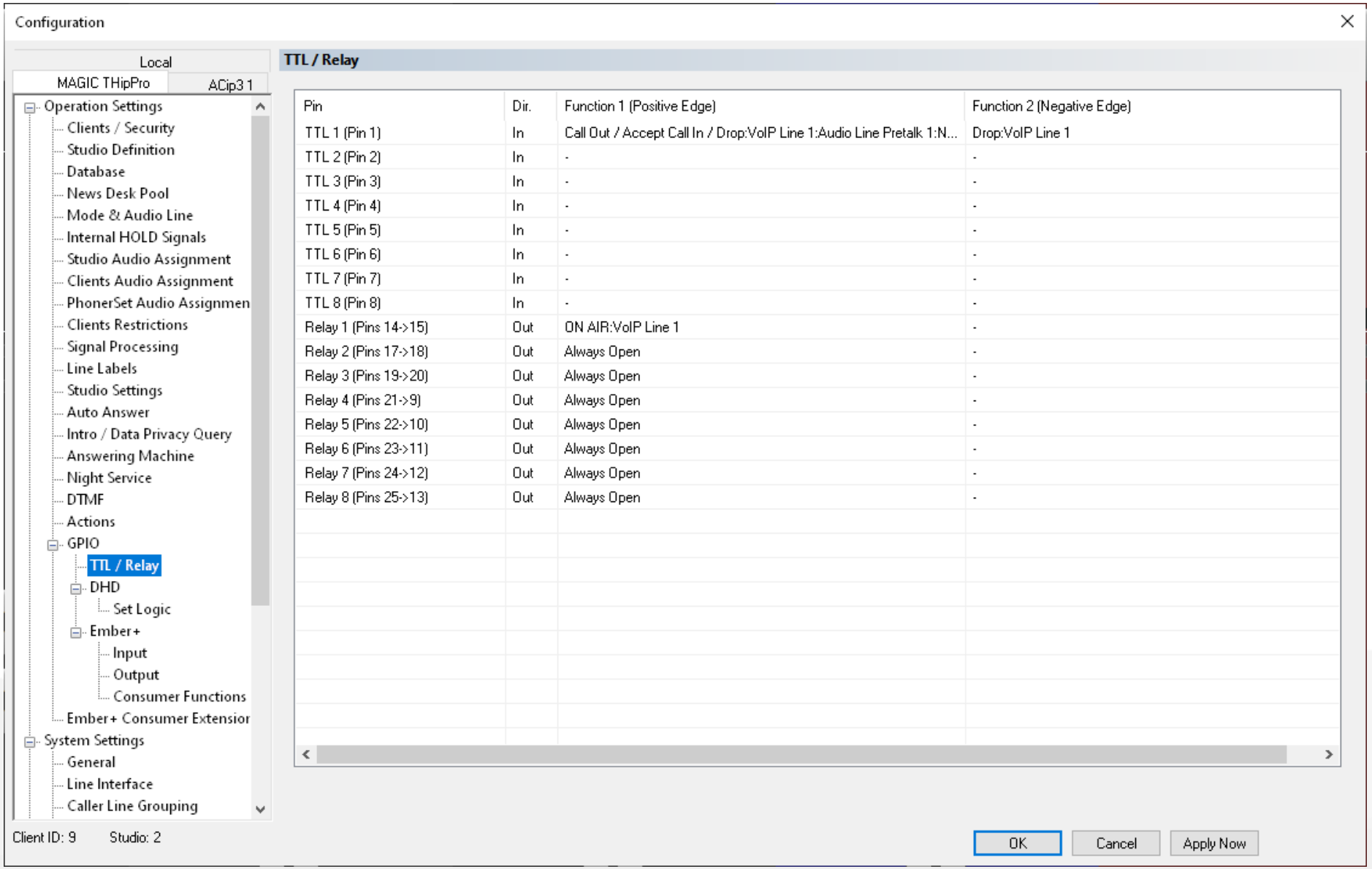
Input
Output
Consumer Functions
Ember+ Consumer Extensior
System Settings
General
Line Interface
Caller Line Grouping
Client ID: 9
Studio: 2
TTL / Relay
Pin
Dir.
Function 1 (Positive Edge)
Function 2 (Negative Edge)
TTL 1 (Pin 1)
In
Call Out / Accept Call In / Drop:VoIP Line 1:Audio Line Pretalk 1:N...
Drop:VoIP Line 1
TTL 2 (Pin 2)
In
-
-
TTL 3 (Pin 3)
In
-
-
TTL 4 (Pin 4)
In
-
-
TTL 5 (Pin 5)
In
-
-
TTL 6 (Pin 6)
In
-
-
TTL 7 (Pin 7)
In
-
-
TTL 8 (Pin 8)
In
-
-
Relay 1 (Pins 14->15)
Out
ON AIR:VoIP Line 1
-
Relay 2 (Pins 17->18)
Out
Always Open
-
Relay 3 (Pins 19->20)
Out
Always Open
-
Relay 4 (Pins 21->9)
Out
Always Open
-
Relay 5 (Pins 22->10)
Out
Always Open
-
Relay 6 (Pins 23->11)
Out
Always Open
-
Relay 7 (Pins 24->12)
Out
Always Open
-
Relay 8 (Pins 25->13)
Out
Always Open
-
OK
Cancel
Apply Now

GPIO (1)

- Configure GPIOs (General Purpose Input / Output) on the GPIO pages.
- The MAGIC THipPro provides 8 hardware TTLs through its GPIO connector at the back.
  - Each TTL GPIO can be configured individually as input or output.
  - Each pin has an internal pull up resistor. An open pin has therefore the logic state “high”.
  - Use for example an external relay to short the pin to device ground which is also available through the GPIO connector.
  - In the "high" position, a TTL output supplies a voltage of 3.3 V and a maximum current of 10 mA.
- The MAGIC THipPro provides 8 hardware Relays through its GPIO connector at the back.
  - A relay can be loaded with maximum 200 mA and 48 V.
- Double-click a list entry to configure the TTL or Relay function.
  - Find the details on the available functions in the **Signalling and Control with EmBER+** document available in the download section of our website.
- If DHD AUDIO MATRIX is enabled, you can configure up to 96 GPIOs under GPIO – DHD – SET LOGIC.
  - Each GPIO can be configured individually as input or output.
  - Find the details on the available functions in the **Signalling and Control with DHD SetLogic** document available in the download section of our website.

GPIO (2)

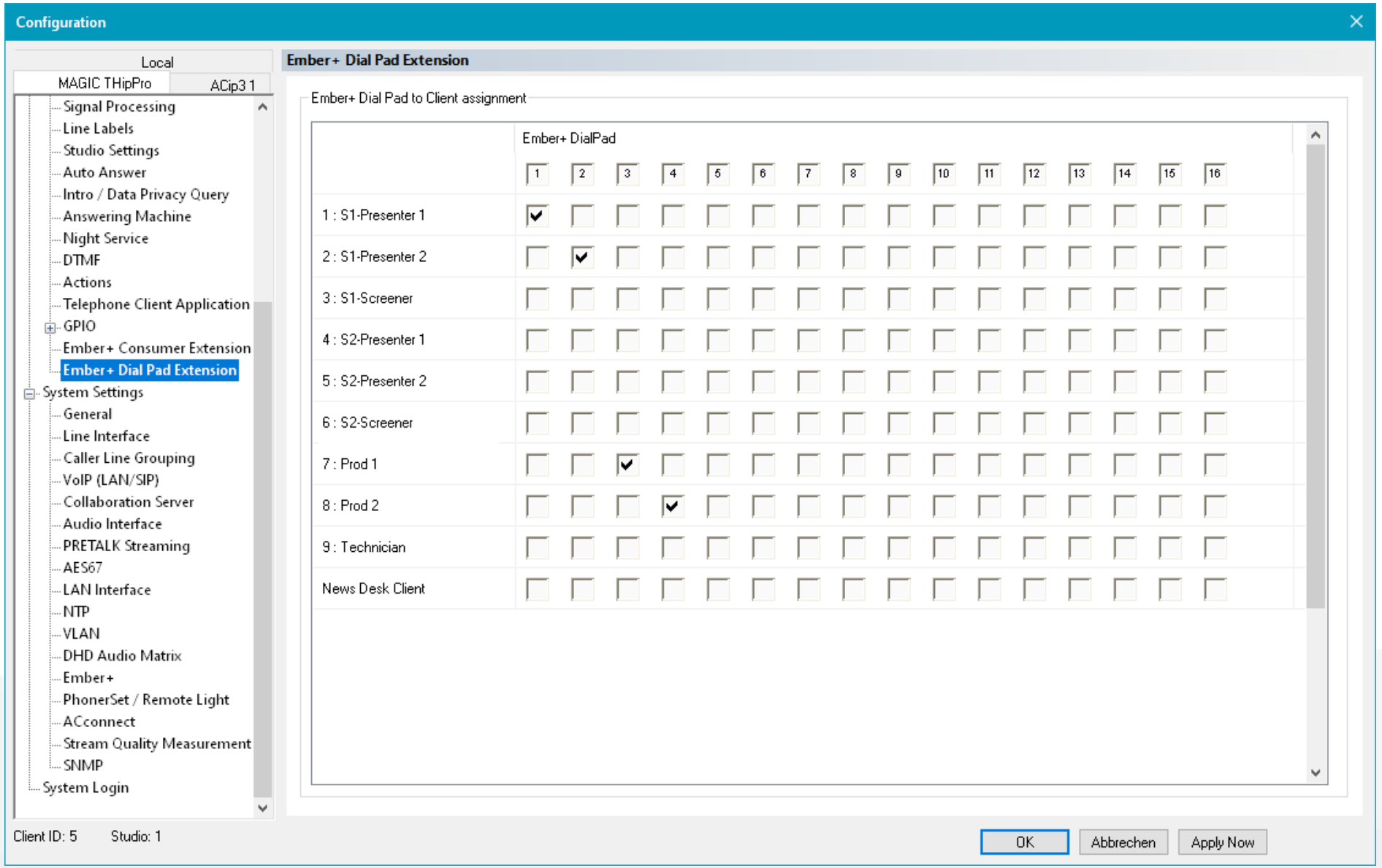
- If EMBER+ PROVIDER is enabled, you can configure up to 96 inputs and 96 outputs under GPIO – EMBER+ – INPUT/OUTPUT.
  - Find the details on the available functions in the **Signalling and Control with EmBER+** document available in the download section of our website.
- If EMBER+ CONSUMER is enabled, you can configure up to 20 functions for each consumer under GPIO – EMBER+ – CONSUMER FUNCTIONS.
  - Find the details on the available functions in the **Signalling and Control with EmBER+** document available in the download section of our website.



Ember+ Consumer Extension (1)

- The EMBER+ CONSUMER EXTENSION makes it easy to control telephone lines of the MAGIC THipPro from a mixing console without using the PC software.
- Configure the workplaces on the EMBER+ CONSUMER EXTENSION configuration page.
  - Find the complete configuration guide with examples in the **Ember+ Consumer Extension** document available in the download section of our website.

Ember+ Consumer Extension (2)



Ember+ Dial Pad Extension (1)

- Up to 16 pre-defined Dial Pads can be provided by the MAGIC THipPro Ember+ Provider.
- Define which PC clients display the number entered on the respective Ember+ Dial Pad on the Ember+ Dial Pad Extension configuration page.
- Find the dial pads in the Ember+ tree of the MAGIC THipPro under:
  AVT MAGIC THipPro > GPIOs > Dial Pad N
- Find the number entered via a dial pad in the Ember+ tree of the MAGIC THipPro under:
  AVT MAGIC THipPro > Operation > Dial Pad Numbers > Dial Pad Number N

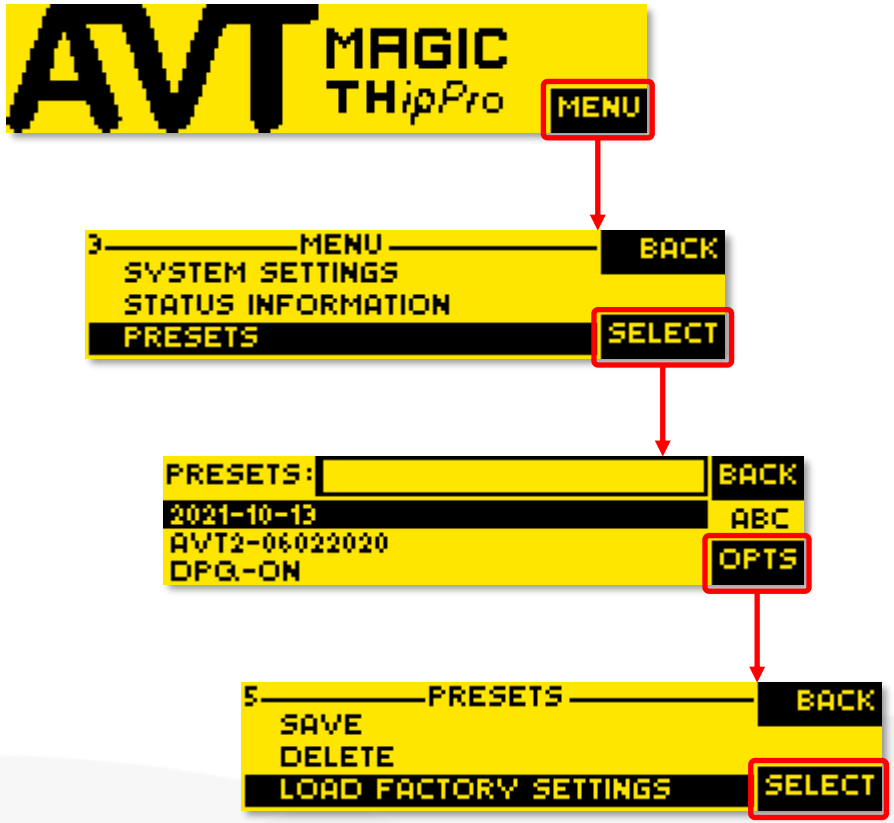
Ember+ Dial Pad Extension (2)

MAGIC THipPro

Setting Factory Settings

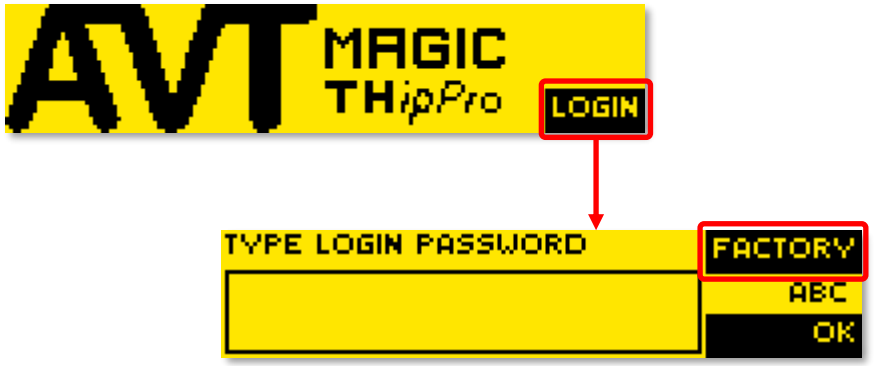
info@avt-nbg.de
www.avt-nbg.de

- MAGIC THipPro (and MAGIC ACip3) can be reset to factory settings via Front Display.
- The configuration of the device is reset.
- All files stored on the device are preserved.
- The configurations of all clients (LAN client, Screener, PhonerSet, …) are preserved.
- If there is no password configured, the device can be reset via front display as shown on the right.



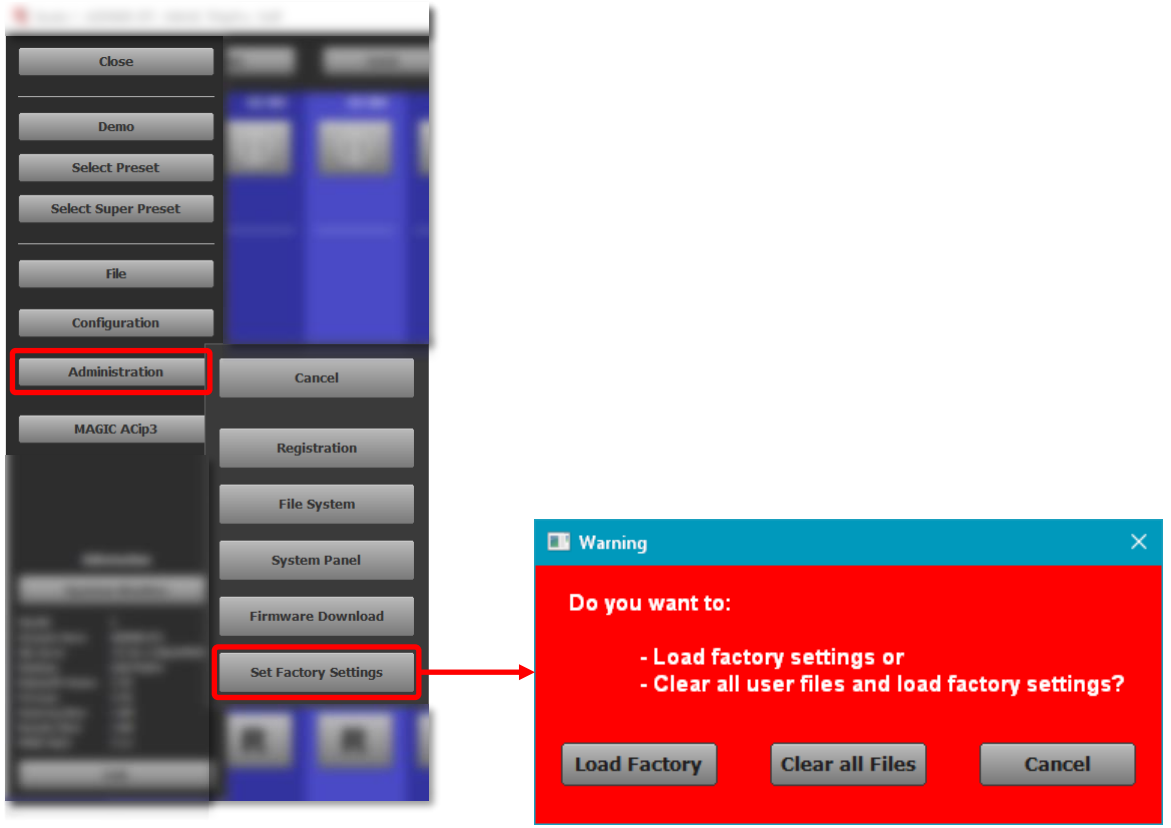
Set Factory Settings (1)

- If there is a password configured but the password is not known, the device can only be reset via front display as shown on the right.



Set Factory Settings (2)

- The MAGIC THipPro can also be reset to factory settings via the LAN Client software.
- Go to MENU – ADMINISTRATION – SET FACTORY SETTINGS.
- Two options are available:
  - LOAD FACTORY: The current configuration is reset to factory settings. All files stored on the MAGIC THipPro are preserved including presets, super presets, recorded hold signals, intro / data privacy query / answering machine messages, and the SIP logfile.
  - CLEAR ALL FILES: The current configuration is reset to factory settings. All files stored on the MAGIC THipPro are deleted including presets, super presets, recorded hold signals, intro / data privacy query / answering machine messages, and the SIP logfile.
- To also reset a connected ACip3, first reset the ACip3 via MENU – MAGIC ACIP3 – SET FACTORY SETTINGS.



Set Factory Settings (3)

MAGIC THipPro

MAGIC THipPro LAN Client

- Local Settings

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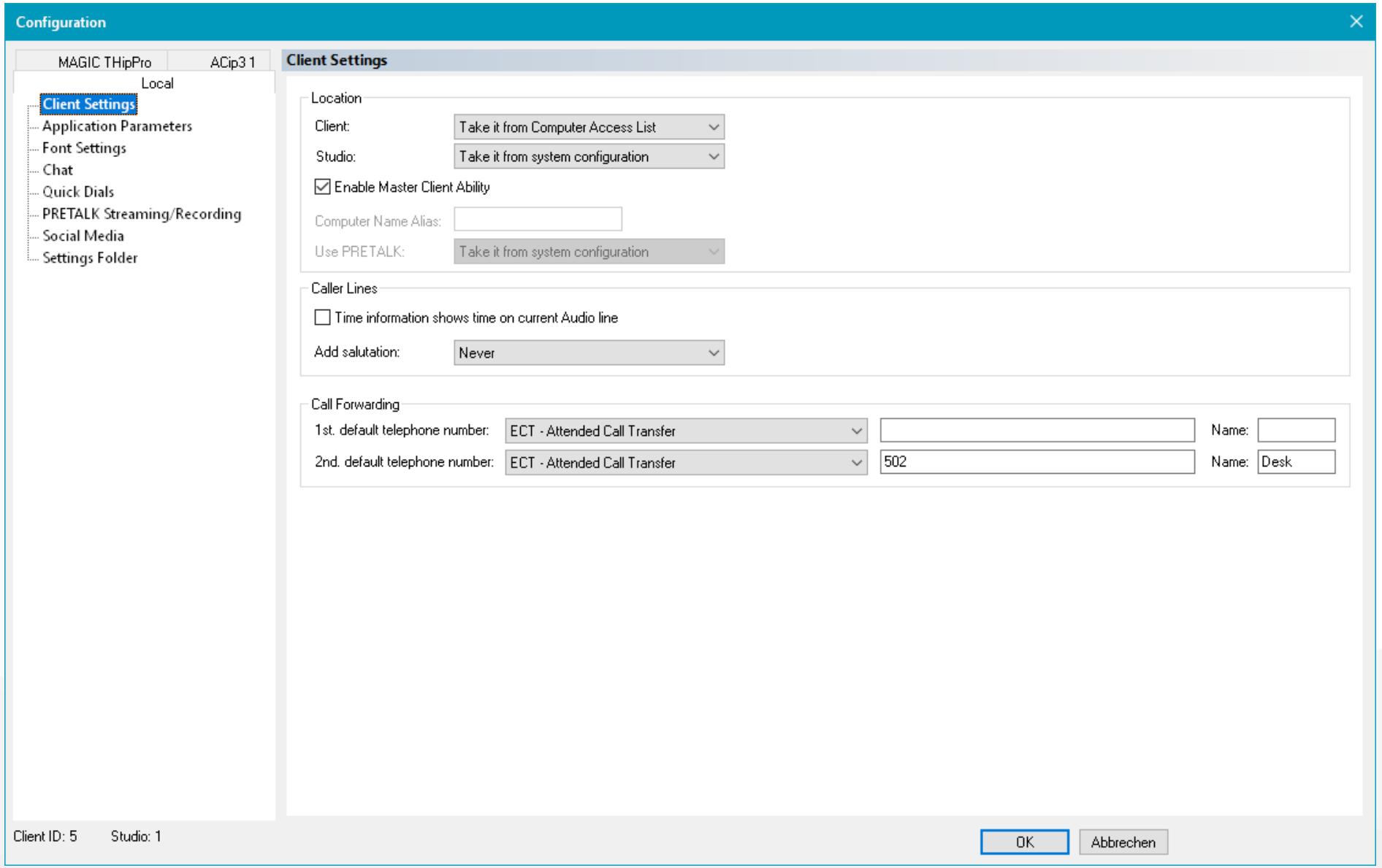
www.avt-nbg.de



Client Settings (1)

- Local settings control the look and the behaviour of the LAN Client PC software.
- They are stored on the PC.
- Find settings regarding the client ID, the presentation of caller lines and call forwarding on the CLIENT SETTINGS page.
- LOCATION:
  - CLIENT: Define how the client retrieves its client ID.
    - TAKE IT FROM COMPUTER ACCESS LIST (default): The PC software searches for its computer name in the CLIENTS / SECURITY list. It takes over the client ID assigned to the computer name.
    - TAKE IT FROM LOCAL SETTINGS: You must define the COMPUTER NAME ALIAS below. The PC software searches for the COMPUTER NAME ALIAS in the COMPUTER NAME / IP ADDRESS column of the CLIENTS / SECURITY list of the MAGIC THipPro configuration. It adopts the respective client ID. This is helpful when there are multiple PCs which have the same role. Define an individual Pretalk interface for the client with USE PRETALK.
    - CLIENT N: The PC software takes over a specific client ID of the CLIENTS / SECURITY list. This option is intended to be used when checking how changes to the system configuration affect a specific client.
    - NEWS DESK CLIENT: The PC software adopts the role of a news desk client. This option is intended to be used when checking how changes to the system configuration affect a specific client. Please note that a news desk client is not allowed to change the system configuration.
- ENABLE MASTER CLIENT ABILITY: Access to shared resources like the database or dynamic Hold files is managed by the master client. The master client is automatically determined by the system from all connected clients. If a client does not have access to shared resources, the master client ability should be deactivated for that client.
- COMPUTER NAME ALIAS: See LOCATION – CLIENT – TAKE IT FROM LOCAL SETTINGS on the left.
- USE PRETALK: Only available if CLIENT = TAKE IT FROM LOCAL SETTINGS.
  - TAKE IT FROM SYSTEM CONFIGURATION: The client uses the Pretalk interface defined on the CLIENTS AUDIO ASSIGNMENT configuration page.
  - PRETALK N: Select an individual Pretalk interface.

Client Settings (2)

- CALLER LINES:
  - TIME INFORMATION SHOWS TIME ON CURRENT AUDIO LINE: By default, a clock is displayed on each telephone line which indicates for how long the caller is already on the line. Enable this option to reset the clock each time the user changes the audio line (Pretalk, Hold, On Air).
  - ADD SALUTATION: Select whether the gender of a caller is displayed on the info button of a telephone line. If activated the caller's name is preceded by Mr. or Mrs. If the gender is set in the phonebook database for that contact.
    - NEVER (default): No salutation is displayed.
    - ALWAYS: The salutation is always displayed.
    - WHEN FIRST NAME IS MISSING: The salutation is only displayed when the caller's first name is not stored in the phonebook database.

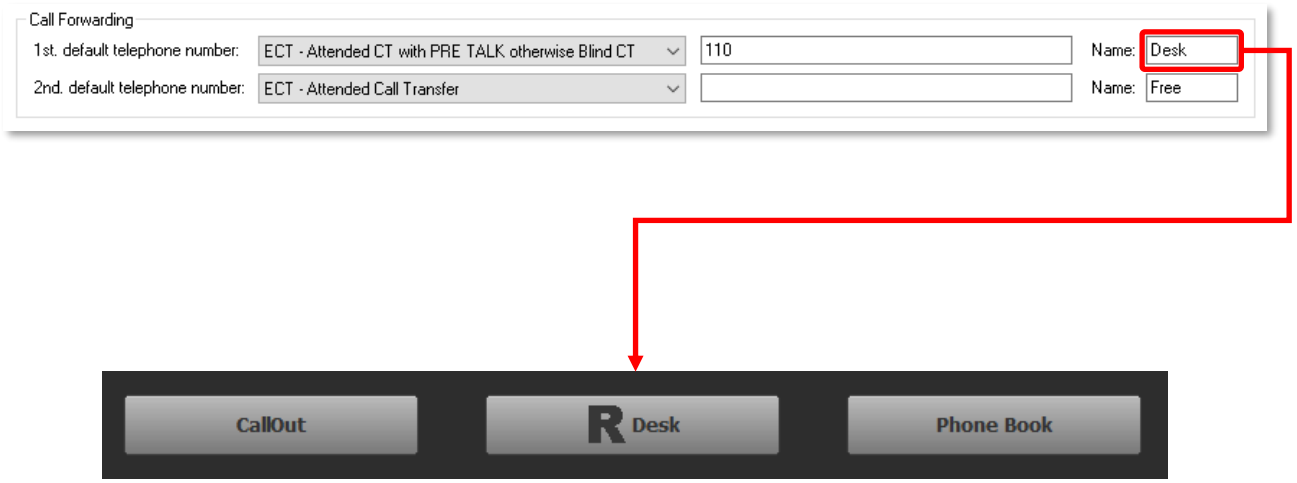
Client Settings (3)

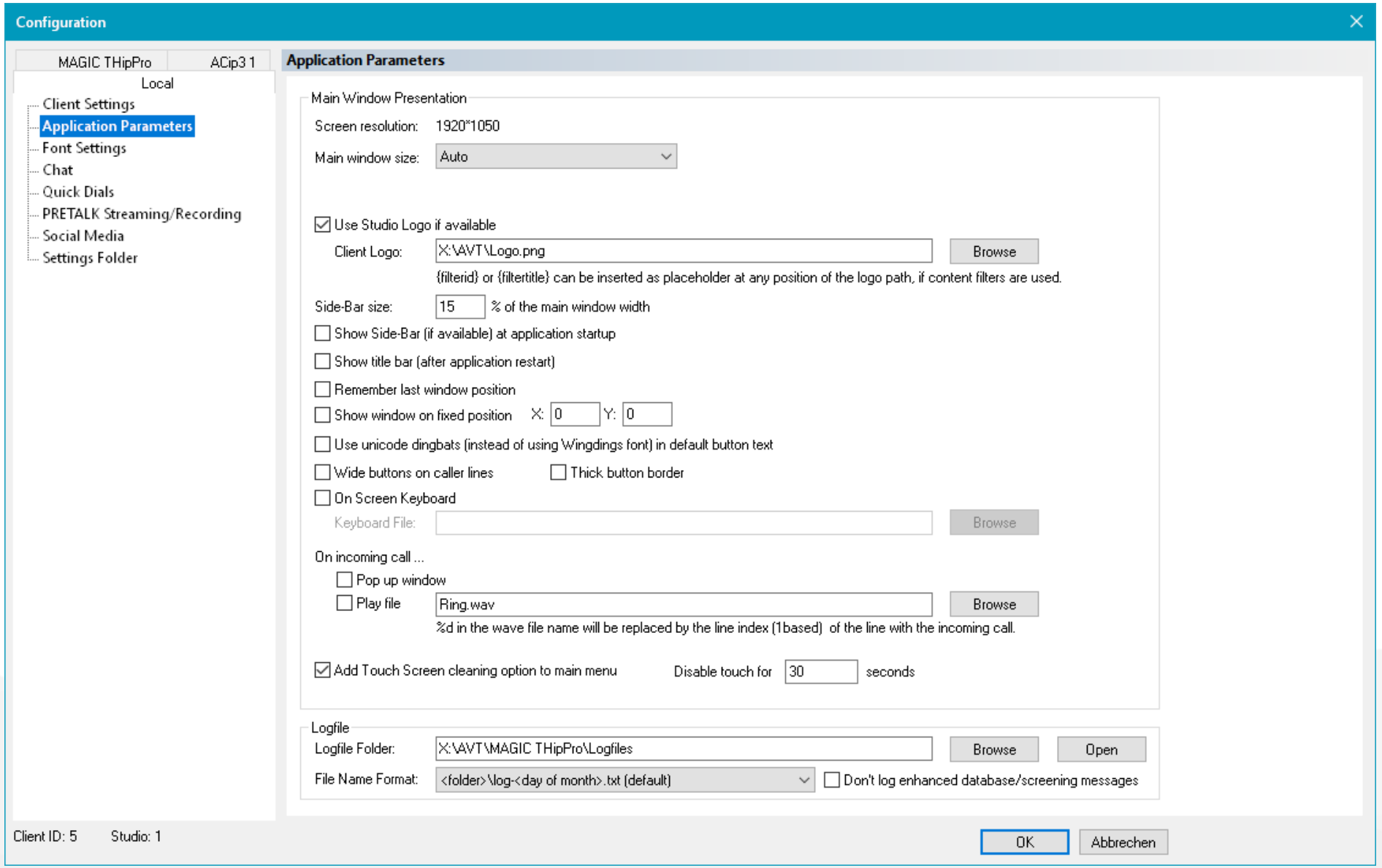
- CALL FORWARDING: Define how call forwarding is presented on the LAN client. Only predefined modes are accessible to the user. Two modes (1st and 2nd) can be defined here. In general, the THipPro allows to talk to the call forwarding destination when the caller is in Pretalk. If the caller is in Hold or On Air, the call transfer is completed directly.
  For each mode, three parameters can be set:
  - TECHNICAL CALL TRANSFER MODE: Define how the call transfer is carried out technically by the system:
    - CALL FORWARDING OVER SEPARATE LINE: Select this mode if the THipPro should control the whole process. Internal telephone lines must be reserved for call forwarding on the LINE INTERFACE configuration page. The THipPro routes audio between the caller line and the call forwarding line. The telephone line is blocked until the caller has hung up.
    - ECT: Stands for Explicit Call Transfer. The call forwarding is done by the PBX or the provider. The THipPro informs the PBX or the provider about the call forwarding destination. When the call transfer is completed the caller line is free for the next call. Three ECT modes are available:
      - ATTENDED CALL TRANSFER: The user can talk to the call forwarding destination when the call is in Pretalk. Otherwise the call transfer is completed directly.
      - BLIND CALL TRANSFER: The call transfer is always completed directly. The user cannot talk to the call forwarding destination.
      - ATTENDED CT WITH PRE TALK OTHERWISE BLIND CT: The user can talk to the call forwarding destination when the call is in Pretalk. Otherwise the call transfer is completed directly.
      - CALL FORWARDING OVER COLLABORATION SERVER LINE: Select this mode if the THipPro should control the whole process and the call forwarding destination is a Microsoft Teams account. Internal collaboration server lines must be reserved for call forwarding on the LINE INTERFACE configuration page. The THipPro routes audio between the caller line and the call forwarding line. The telephone line is blocked until the caller has hung up.

Client Settings (4)

- NUMBER / COLLABORATION SERVER ACCOUNT: You could leave this field empty or enter a telephone number or a Microsoft Teams account. If the field is empty the user will be prompted to enter the call forwarding destination. Otherwise the call is forwarded to the number entered here.
- NAME: Define the label of the call forwarding button in the top menu bar.

- The call forwarding button in the top menu bar is used to toggle between the two call forwarding modes. The button switches back to the first mode after each call transfer. The second mode is only used temporarily. The label shows which mode is active.





Application Parameters (1)

- Define the display of the interface of the software as well as logging on the APPLICATION PARAMETERS configuration page.
- SCREEN RESOLUTION: Displays the screen resolution of the monitor the application is displayed on as it is provided by the operating system. This may be different from the resolution defined in the graphic card driver due to the high DPI scaling feature of the operating system.
- MAIN WINDOW SIZE: Define the size of the main window. Several options are available:
  - AUTO: The window will automatically take up the full screen without covering the taskbar. The window size is determined when the application starts. If the screen resolution changes or the taskbar changes, the application needs to be restarted.
  - CUSTOM: Set a custom windows size in pixels. The width and the height must be between 400 and 7680 pixels.
  - Predefined sizes: Select one of the predefined windows sizes.
- LOGO: The LAN client software can display a custom logo in the top right corner if there is enough space in the top menu bar. The recommended format is PNG with 400x200 pixels and transparent background.
  - USE STUDIO LOGO IF AVAILABLE: Enable this option to display the logo defined in the configuration of the MAGIC THipPro on the STUDIO SETTINGS configuration page. The studio logo is displayed if the path is available for the client.
  - CLIENT LOGO: Define the logo locally if the studio logo cannot be used. Use the {filterid} or {filtertitle} placeholders to set different logos for each login when USER CONTENT FILTERs are activated.
- SIDEBAR SIZE: Define the width of the sidebar on the right in fractions of the app's windows size. The sidebar display LAST CALLS, RECORDINGS or ANSWERING MACHINE messages.

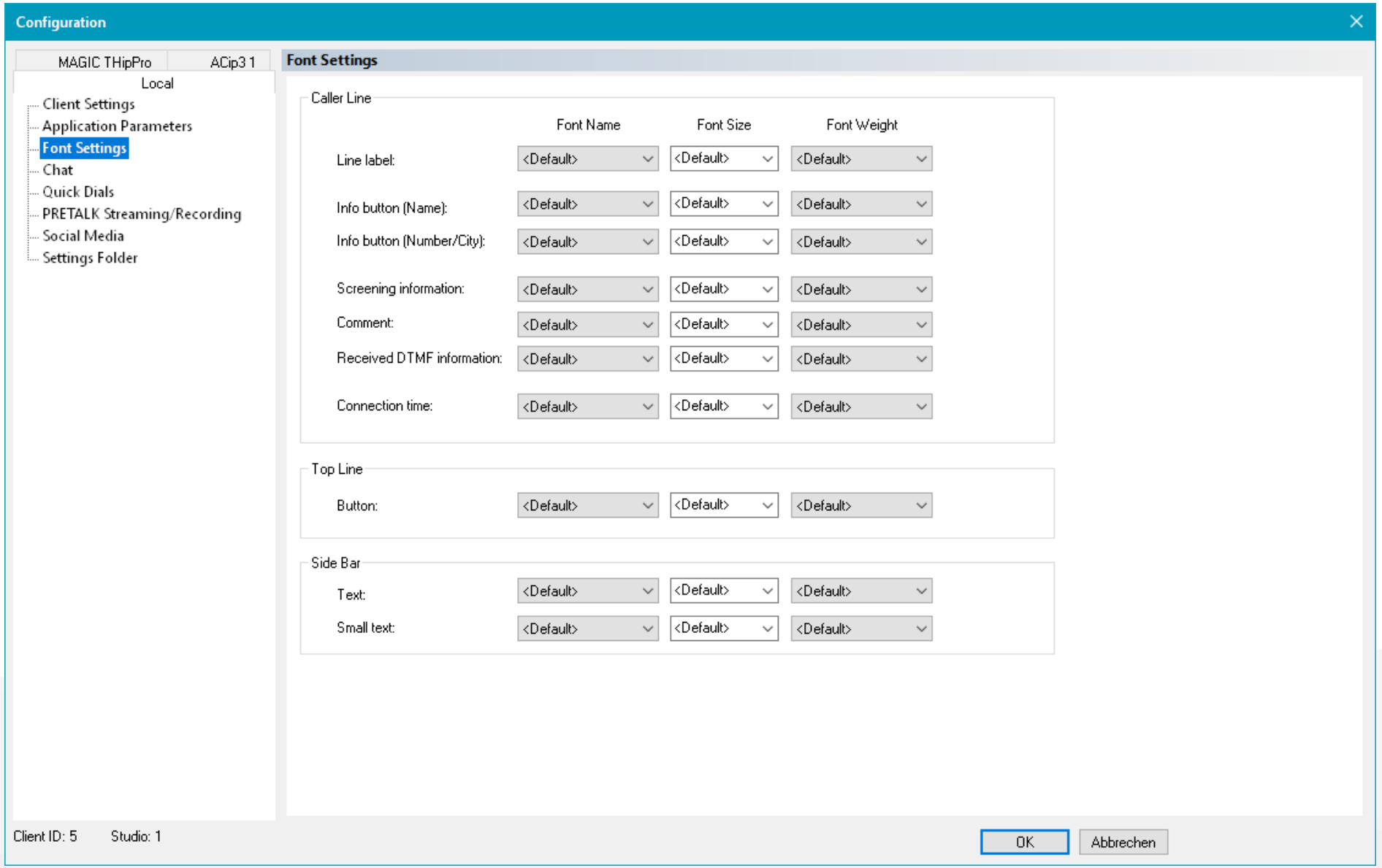
Application Parameters (2)

- SHOW SIDEBAR (IF AVAILABLE) AT APPLICATION STARTUP: By default, the sidebar is hidden. Enable this option to show the sidebar when the app starts.
- SHOW TITLE BAR (AFTER APPLICATION RESTART): By default, the window has no title bar. The title bar can be useful to drag the window around with the mouse. Enable this option to show the title bar. A restart of the application is required for the changes to take effect.
- REMEMBER LAST WINDOW POSITION: The last window position of the main window is stored when closing the app. The next time the app is started, the window is displayed in the same place if this option is enabled. Otherwise, it is displayed in the top left corner of the main screen.
- SHOW WINDOW ON FIXED POSITION: Define the position of the top left corner of the application window on the screen when the application starts. The top left corner of the main screen has the coordinates X=0, Y=0.
- USE UNICODE DINGBATS (INSTEAD OF WINGDINGS FONT) IN DEFAULT BUTTON TEXT: Define whether to use the Microsoft Wingdings font or Unicode dingbat characters for default labels of the On Air buttons (❶, ❷, …). Nowadays most fonts include the Unicode characters. So, it is recommended to enable this option.
- WIDE BUTTONS ON CALLER LINES: Enable this option to use wider buttons for Pretalk, Hold, On Air, ….
- THICK BUTTON BORDER: Enable this option display thicker edges on the Pretalk, Holk, On Air, … buttons.
- ON SCREEN KEYBOARD: The application can display an on-screen keyboard for text entry. Select a keyboard layout by loading the corresponding KEYBOARD FILE from the installation directory. The keyboard is automatically displayed when it is needed.

Application Parameters (3)

- ON INCOMING CALL: Apart from blinking audio line buttons the application can indicate incoming calls in two more ways:
  - POP UP WINDOW: Enable this option to bring the LAN client window into the foreground when a call comes in.
  - PLAY FILE: Enable this option to play the specified audio file when a call comes in. Use %d to play a different file for each line.
    Example: File name C:\Ring %d.wav
    An incoming call on the first line plays the file C:\Ring 1.wav. Second line = C:\Ring 2.wav.
- ADD TOUCH SCREEN CLEANING OPTION TO MAIN MENU: Enable this option to add a button labeled “Touch Screen Cleaner” to the menu sidebar. Press that button to disable the whole screen for the specified time. During this time the screen can be cleaned without making any undesired inputs. Press escape to abort.
  - DISABLE TOUCH FOR N SECONDS: Set time needed for cleaning the screen.
- LOGFILE: The LAN client software writes one logfile per day. The file name ends with log-01.txt, log-02.txt, …. The number stands for the day of the month. So, the logfiles are overwritten each month.
  - LOGFILE FOLDER: Specify the folder to store the logfiles in.
  - BROWSE: Select a logfile folder from the file system.
  - OPEN: Press the button to open the logfile of the current day.
  - FILE NAME FORMAT: Specify the file name and optional subfolder.
    - Adding <lan-client> to the file name is recommended when LAN client and Screener use the same logfile folder.
    - Adding <computer name> to the path is recommended when the logfiles of several clients are written to a common network share.
  - DON’T LOG ENHANCED DATABASE / SCREENING MESSAGES: Enable this option to get smaller logfiles. Not recommended.

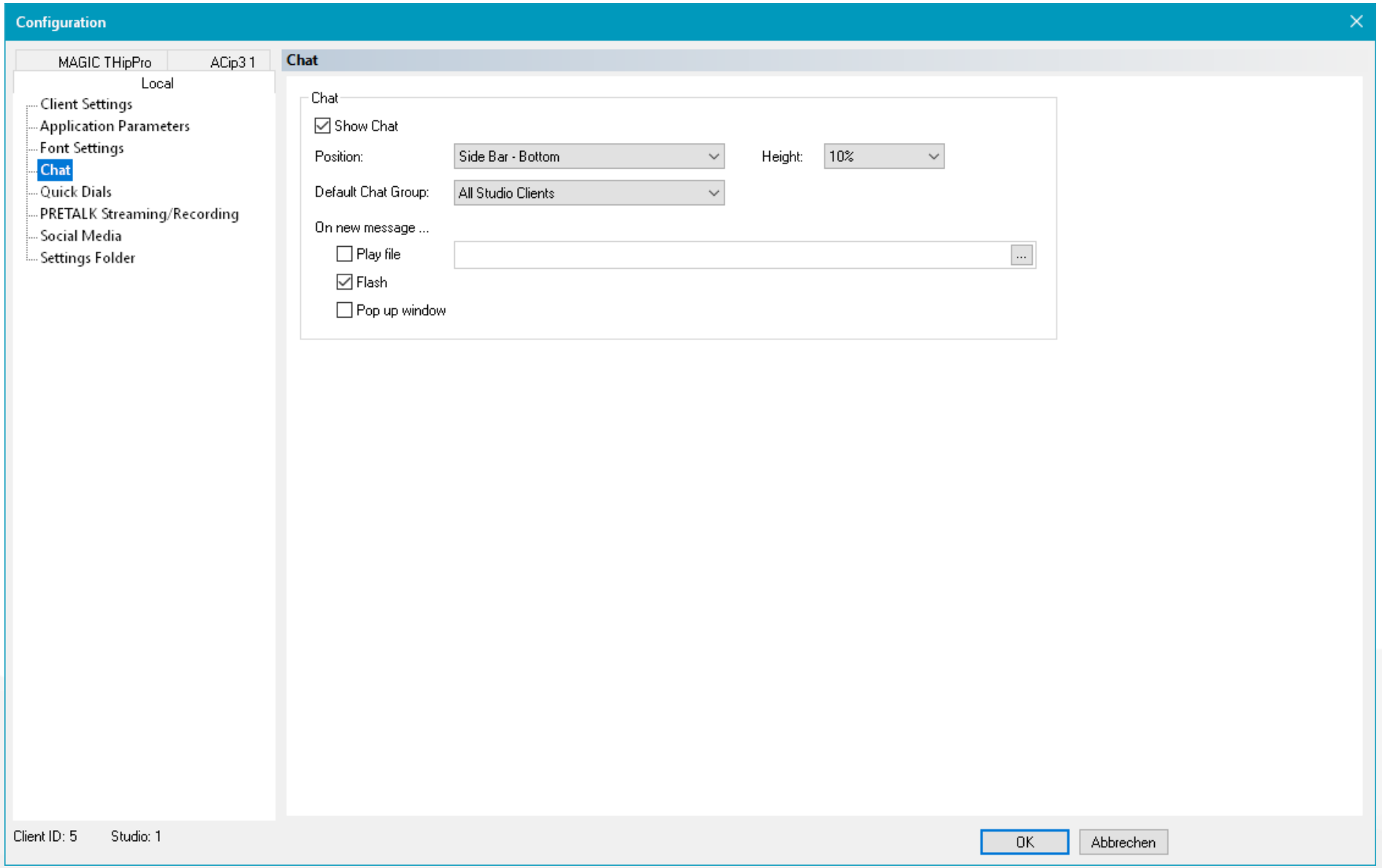
Application Parameters (4)



Font Settings (1)

- Define how text is displayed on the main window on the FONT SETTINGS page.
- For each element you can change:
  - FONT NAME
  - FONT SIZE
  - FONT WEIGHT
- CALLER LINE: The text elements on the telephone lines:
  - LINE LABEL
  - INFO BUTTON (NAME)
  - INFO BUTTON (NUMBER / CITY)
  - SCREENING INFORMATION
  - COMMENT
  - RECEIVED DTMF INFORMATION
  - CONNECTION TIME.
- TOP LINE: The button labels on the top menu bar.
  - BUTTON
- SIDEBAR: The text elements on the menu sidebar.
  - TEXT
  - SMALL TEXT
- For each element you can select <default> to reset the value to application default.

Font Settings (2)

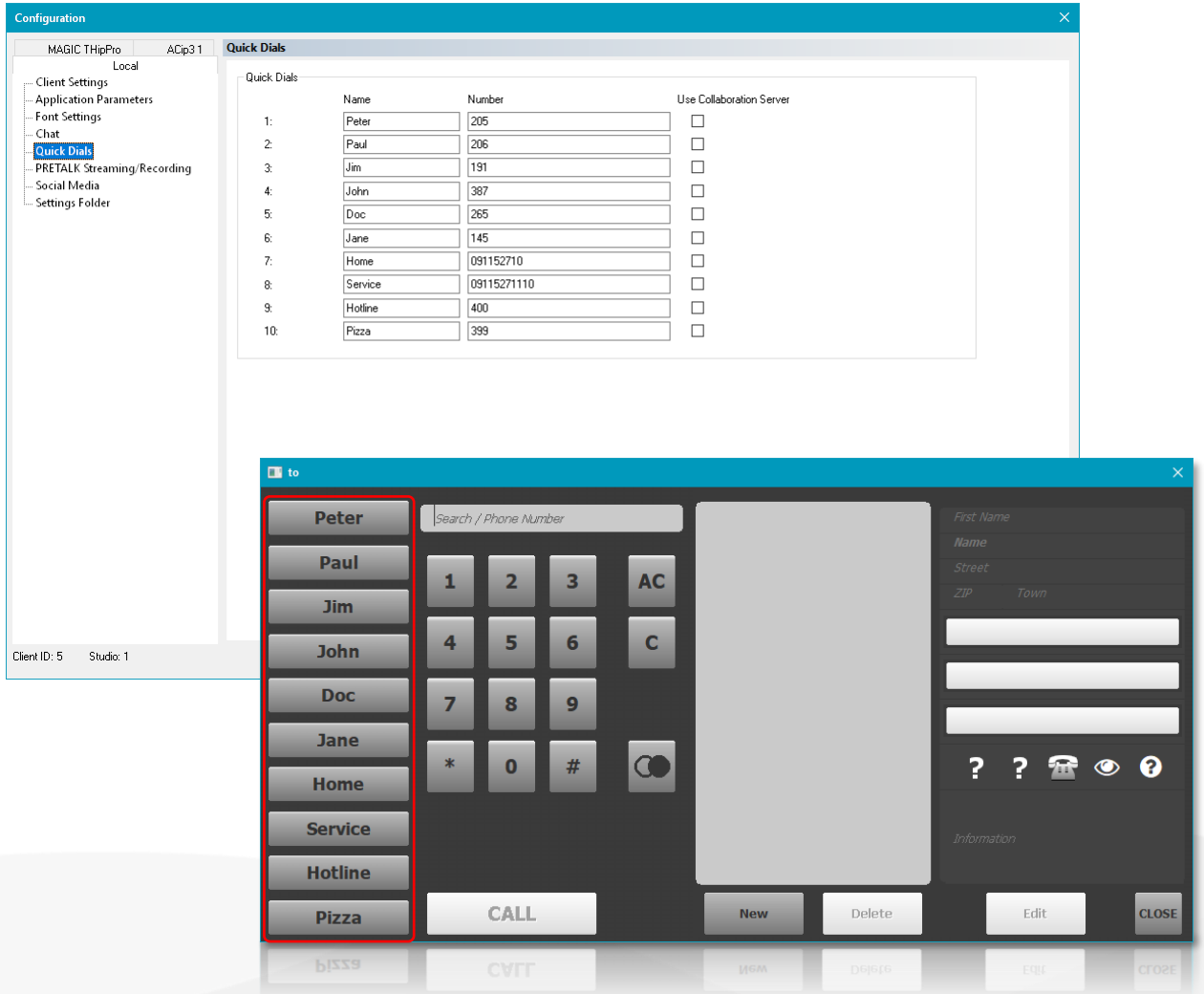

Configuration
MAGIC THipPro
ACip3 1
Local
Client Settings
Application Parameters
Font Settings
Chat
Quick Dials
PRETALK Streaming/Recording
Social Media
Settings Folder
Chat
Chat
Show Chat
Position:
Side Bar - Bottom
Height:
10%
Default Chat Group:
All Studio Clients
On new message ...
Play file
Flash
Pop up window
Client ID: 5
Studio: 1
OK
Abbrechen

Chat (1)

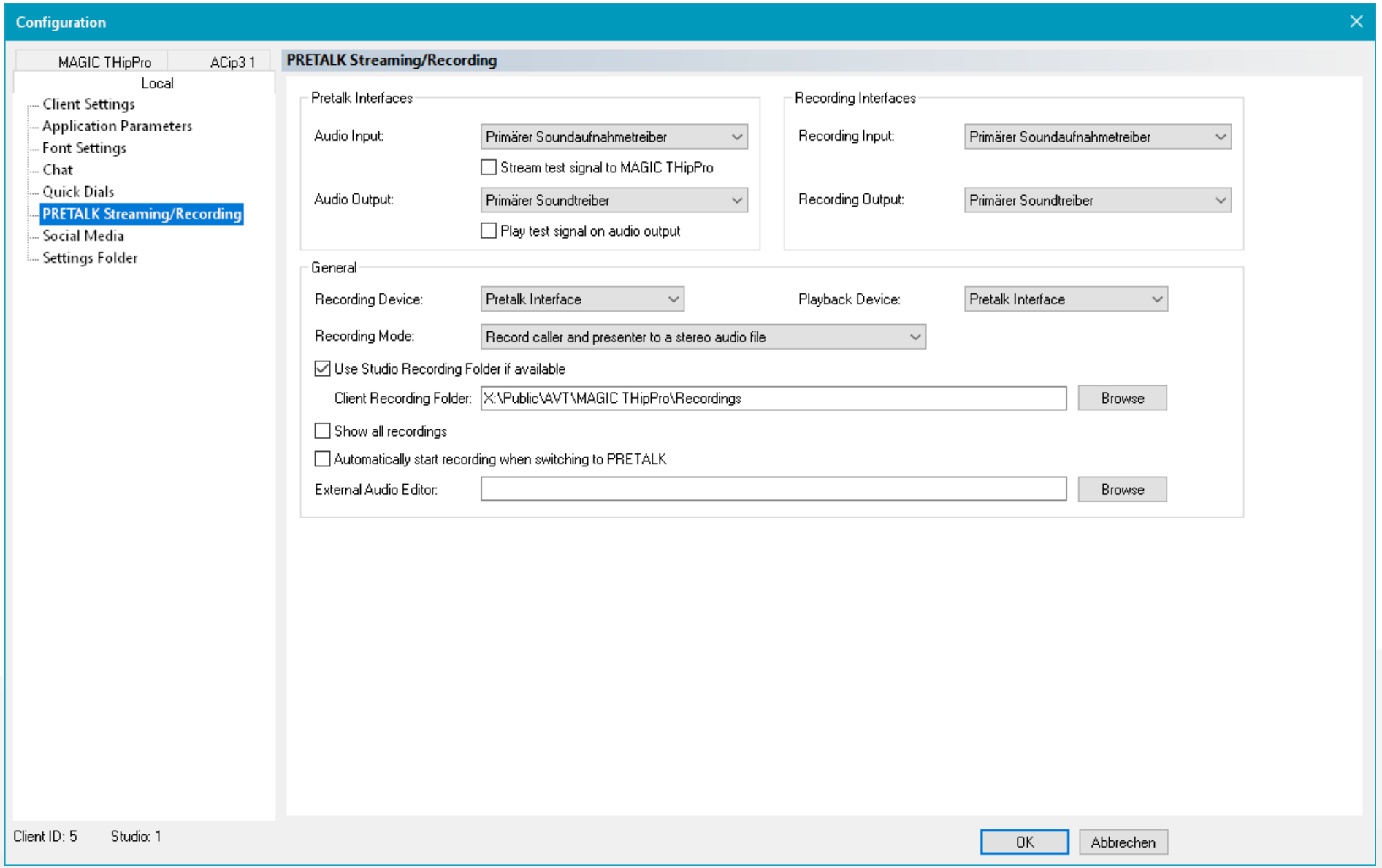
- Define how the LAN client can access the THipPro chat on the CHAT page.
- The PC clients have an integrated chat function. A chat window can be displayed in the sidebar on the right.
- SHOW CHAT: Enable this option if the chat window should be displayed on this client.
- POSITION: The chat window can either occupy the upper or the lower half of the sidebar on the right.
- HEIGHT: Define the height of the chat window in fractions of the total height of the sidebar on the right.
- DEFAULT CHAT GROUP: There are several chat groups. Define which one is show when starting the LAN client.
  - ALL STUDIO CLIENTS: The chat group includes all client of a studio.
  - LAN CLIENTS: The chat group includes all LAN clients of the studio.
  - SCREENER: The chat group includes all Screener clients of the studio.
- ON NEW MESSAGE: Define how a new message is indicated.
  - PLAY FILE: Enable this option to play the specified audio file.
  - FLASH: Enable this option to make the frame of the chat feed flash.
  - POP UP WINDOW: Enable this option to bring the application window to the foreground.

Chat (2)

- Up to ten individual quick dials for each LAN client can be configured on the QUICK DIALS page.
- The Quick Dials are displayed on the right in the phone book.
- NAME: Enter the name which is displayed on the quick dial button in the phone book.
- NUMBER: Enter the telephone number or the Microsoft Teams account which is dialled when the quick dial button in the phone book is pressed.
- USE COLLABORATION SERVER: Enable this option if a Microsoft Teams account is entered under NUMBER.



Quick Dials



PRETALK Streaming / Recording (1)

- There are two ways of using the built-in audio interfaces of the PC for Pretalk with a caller on the THipPro.
- PRETALK STREAMING
  - Can be used for Pretalk or as audio interface for the answering machine. (See CONFIGURATION - ANSWERING MACHINE for more details.)
  - The audio signal of an audio input of the PC is streamed to the THipPro by the LAN Client.
  - The THipPro streams the audio signal of the caller to the PC.
  - The LAN client outputs the audio signal of the caller to an audio interface of the PC.
  - A Pretalk streams is either fixed, where there is a permanent stream between the PC and the THipPro, or dynamic, where the LAN client requests a stream from the THipPro when needed.
  - The audio signals of the caller and the user can also be recorded by the LAN client.
  - The RECORD button on the LAN client is only available when at least one call is in Pretalk.
- PRETALK RECORDING
  - Can be used if the audio signals are transmitted between THipPro and PC via the audio interfaces of the THipPro (analogue, AES/EBU, AES67, Dante, Ravenna).
  - The LAN client can record the audio signal from the audio input of the PC.
  - The LAN client can use an audio output of the PC to play back the recordings.
  - The RECORD button on the LAN client is always available.

PRETALK Streaming / Recording (2)

- PRETALK INTERFACES: Define the audio interfaces of the PC which should be used for Pretalk streaming.
  - AUDIO INPUT: All available audio inputs are listed here. Select an audio input or the Primary Sound Capture Driver. (Check the sound settings of the operating system to see which audio interface is set as Primary Sound Capture Driver.)
  - STREAM TEST SIGNAL TO THIPPRO: If enabled, the LAN client uses the clock provided by the audio interface to generate an audio signal which is streamed to the THipPro. There must be a telephone line in pretalk to hear the audio signal at the caller's end.
  - AUDIO OUTPUT: All available audio outputs are listed here. Select an audio output or the Primary Sound Driver. (Check the sound settings of the operating system to see which audio interface is set as Primary Sound Driver.)
  - PLAY TEST SIGNAL ON AUDIO OUTPUT: If enabled the LAN client generates an audio signals and plays it on the audio output if packets from the THipPro are received.
- RECORDING INTERFACES: Define the audio interfaces of the PC which should be used for Pretalk Recording.
  - AUDIO INPUT: All available audio inputs are listed here. Select an audio input or the Primary Sound Capture Driver. (Check the sound settings of the operating system to see which audio interface is set as Primary Sound Capture Driver.)
  - AUDIO OUTPUT: All available audio outputs are listed here. Select an audio output or the Primary Sound Driver. (Check the sound settings of the operating system to see which audio interface is set as Primary Sound Driver.)

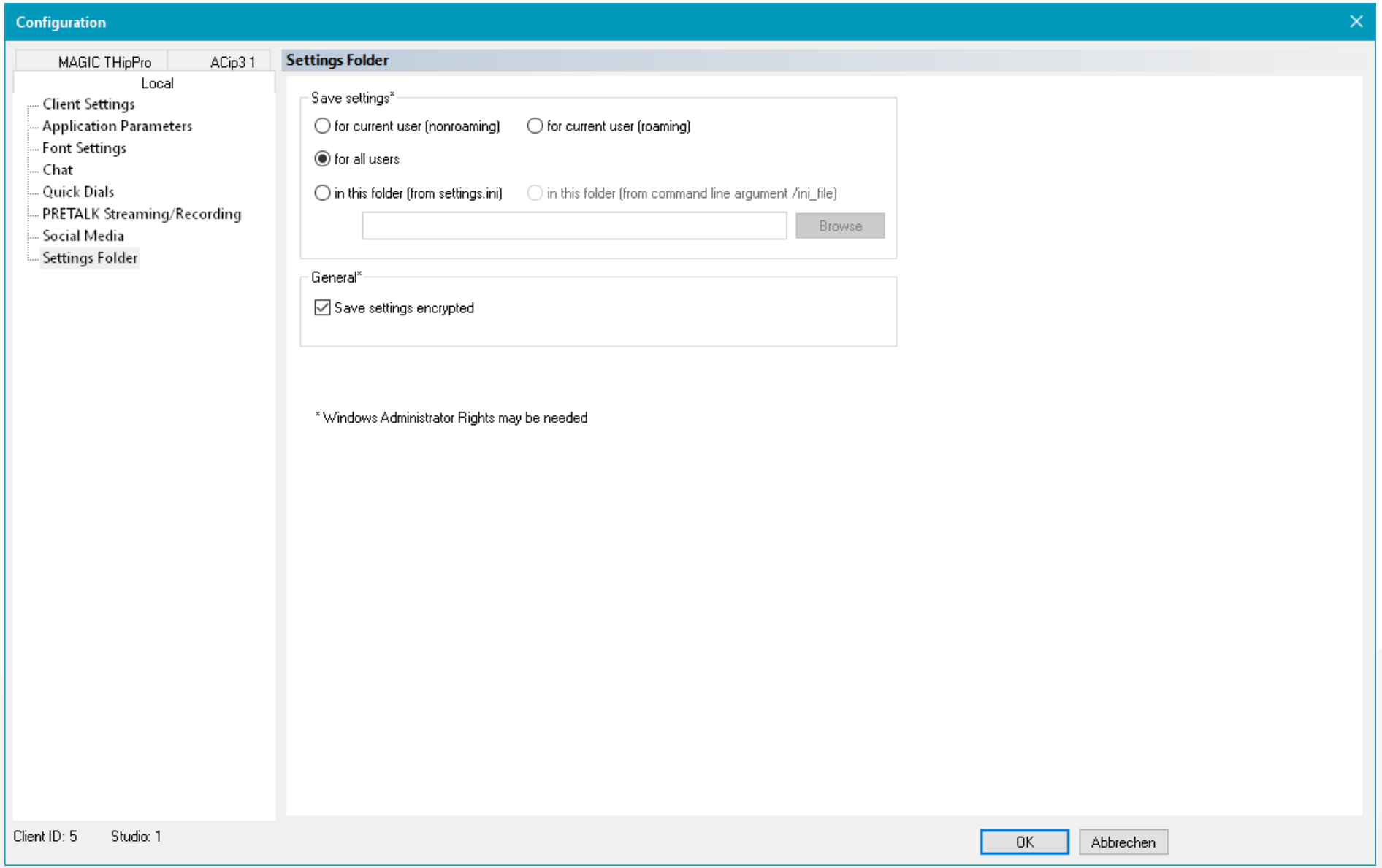
PRETALK Streaming / Recording (3)

- GENERAL
  - RECORDING DEVICE: Define if Pretalk Streaming or Pretalk Recording should be used when pressing the RECORD button on the main panel of the LAN client software.
    - PRETALK INTERFACE: Select if Pretalk Streaming should be used.
    - RECORDING INTERFACE: Select if Pretalk Recording should be used.
  - PLAYBACK DEVICE: Define which audio output device should be used for playback of recorded audio files.
    - PRETALK INTERFACE: Select if the output device of Pretalk Streaming should be used.
    - RECORDING INTERFACE: Select if the output device of Pretalk Recording should be used.
- RECORDING MODE: Define which audio signals should be recorded.
  - RECORD CALLER TO A MONO AUDIO FILE: Only the audio signal of the caller is recorded and written to a mono audio file.
  - RECORD CALLER AND PRESENTER TO A STEREO AUDIO FILE: The audio signals of the caller and the user of the LAN client are recorded and written to separate channels of a stereo audio file.
  - RECORD CALLER AND PRESENTER TO A MONO AUDIO FILE: The audio signals of the caller and the user of the LAN client are recorded and mixed into a mono audio file.

PRETALK Streaming / Recording (4)

- USE STUDIO RECORDING FOLDER IF AVAILABLE: Enable this option if the recordings should be stored in the Recording folder which is defined on the STUDIO SETTINGS configuration page of the THipPro. If the studio recording folder is not available for the LAN client it will use the client recording folder.
- CLIENT RECORDING FOLDER: Specify the folder where recordings should be stored. This could be a local folder or a network share. Use the BROWSE button to select a folder from the file system.
- SHOW ALL RECORDINGS: By default, the LAN client displays only the recordings created by itself in the Recordings list in the sidebar on the right. Enable this option to display all recordings present in the recording folder used by the LAN client.
- AUTOMATICALLY START RECORDING WHEN SWITCHING TO PRETALK: Enable this option to automatically record any caller in Pretalk. Recording stops automatically when a call is switched to Hold or On Air or when the call is dropped.
- EXTERNAL AUDIO EDITOR: Define an external audio editor. Display the Recordings list on the sidebar on the right. Click on a recording with the right mouse button and click EDIT to open the recording in the specified audio editor.

PRETALK Streaming / Recording (5)



Settings Folder (1)

- Define the storage location of the local settings on the SETTINGS FOLDER page.
- Local settings include all settings under the LOCAL tab in the system configuration as well as the settings under MENU – CONFIGURATION – CONTROL INTERFACE.
- The selected storage location determines which access rights are required to change the local settings.
- Changing these settings may require administrator rights.
- Select a settings location:
  - FOR CURRENT USER (NONROAMING): The settings are saved in the user directory of the logged-in account and are not synchronized to other PCs. User rights are sufficient to change the local settings. (%APPDATA%\LOCAL\AVT\MAGIC THipPro LAN)
  - FOR CURRENT USER (ROAMING): The settings are saved in the user directory of the logged-in account and synchronized to other PCs in the domain. User rights are sufficient to change the local settings. (%APPDATA%\ROAMING\AVT\MAGIC THipPro LAN)
  - FOR ALL USERS: All users of the PC use the same settings. Administrator rights are required to change the local settings. (%PROGRAMDATA%\AVT\MAGIC THipPro LAN)
  - IN THIS FOLDER (FROM SETTINGS.INI): The settings are saved in an adjustable folder path. The path is saved in the settings.ini file in the installation directory. The access rights of the folder determine who can change the Local Settings.
  - IN THIS FOLDER (FROM COMMAND LINE ARGUMENT /INI_FILE): The settings are saved in an adjustable folder path. The path was passed by command line parameter. The access rights of the folder determine who can change the Local Settings.
- By activating the option SAVE SETTINGS ENCRYPTED the settings file cannot be read with a text editor

Settings Folder (2)

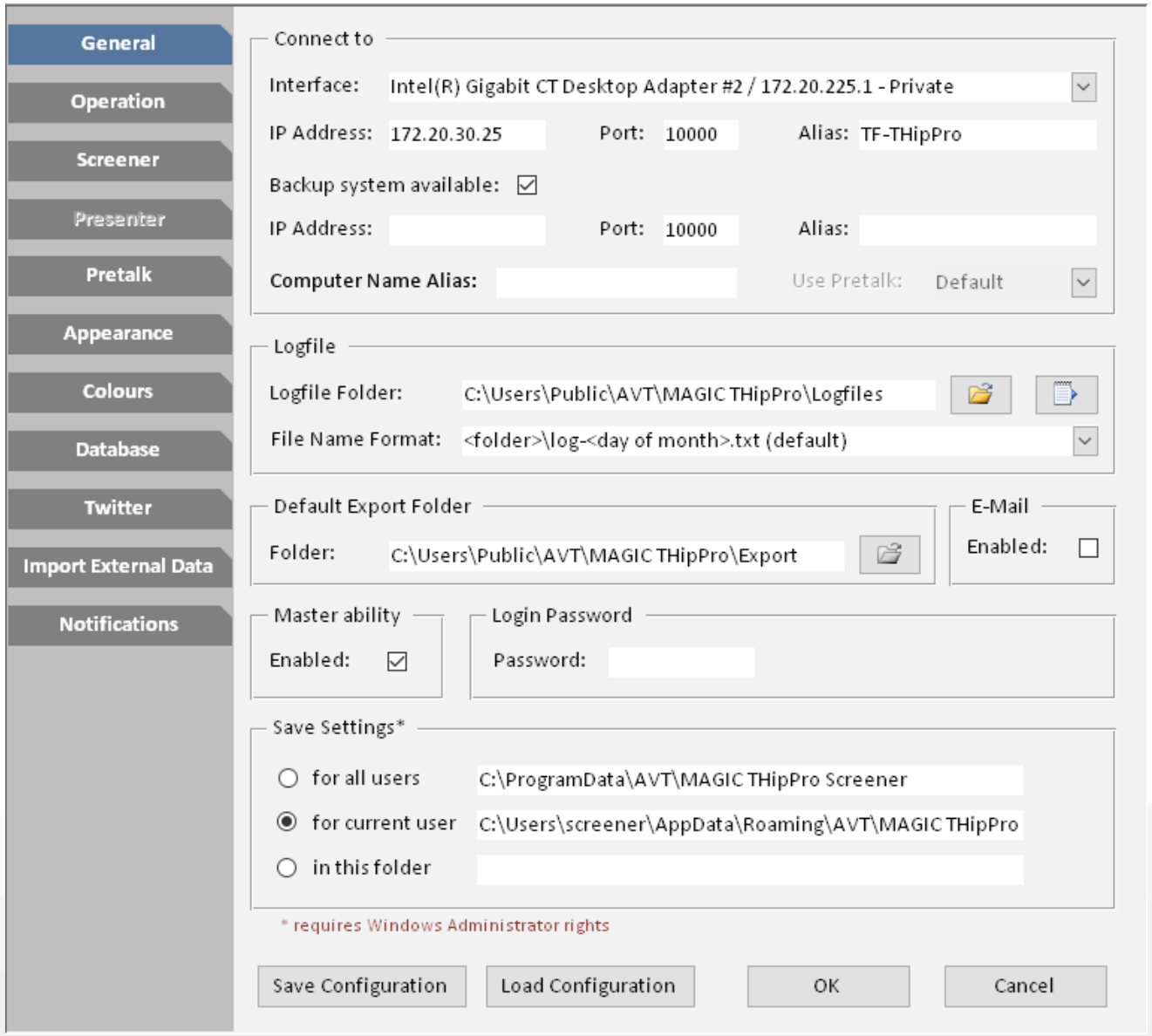
Audio
Video
Technologies

MAGIC THipPro

MAGIC THipPro Screener

- Local Configuration

info@avt-nbg.de
www.avt-nbg.de


General
Operation
Screener
Presenter
Pretalk
Appearance
Colours
Database
Twitter
Import External Data
Notifications
Connect to
Interface: Intel(R) Gigabit CT Desktop Adapter #2 / 172.20.225.1 - Private
IP Address: 172.20.30.25
Port: 10000
Alias: TF-THipPro
Backup system available:
IP Address:
Port: 10000
Alias:
Computer Name Alias:
Use Pretalk: Default
Logfile
Logfile Folder: C:\Users\Public\AVT\MAGIC THipPro\Logfiles
File Name Format: <folder>\log-<day of month>.txt (default)
Default Export Folder
Folder: C:\Users\Public\AVT\MAGIC THipPro\Export
E-Mail
Enabled:
Master ability
Enabled:
Login Password
Password:
Save Settings*
for all users C:\ProgramData\AVT\MAGIC THipPro Screener
for current user C:\Users\screener\AppData\Roaming\AVT\MAGIC THipPro
in this folder
* requires Windows Administrator rights
Save Configuration
Load Configuration
OK
Cancel

General (1)

- Click the MENU icon in the top left corner of the THipPro Screener software and select LOCAL CONFIGURATION.
- A window will be displayed showing the GENERAL configuration page.
- CONNECT TO: Specify how the Screener software connects to a THipPro.
  - INTERFACE: Select the network card of the PC which has access to the THipPro. Select DEFAULT to let the operating system determine the network card automatically.
  - IP ADDRESS: Enter the IP address of the LAN interface of the THipPro to be used for control.
  - PORT: Enter the port number used for PC control (default = 10 000)
  - ALIAS: Using the Studio button in the top bar of the main panel, you can switch between the main device and the backup device. The text entered here is shown on the button instead of the IP address of the device.
- BACKUP SYSTEM AVAILABLE: Enable this option if the user should be able to switch between two THipPro devices via a button in the top bar of the main panel.
  - IP ADDRESS: Enter the IP address of the LAN interface of the THipPro to be used for control.
  - PORT: Enter the port number used for PC control (default = 10 000)
  - ALIAS: Using the Studio button in the top bar of the main panel, you can switch between the main device and the backup device. The text entered here is shown on the button instead of the IP address of the device.

General (2)

- COMPUTER ALIAS NAME: By default, the Client ID of the Screener is defined by entering the computer name or IP address in the CLIENTS / SECURITY list of the MAGIC THipPro configuration. If multiple clients should share the same client ID, an alias must be defined in the COMPUTER NAME / IP ADDRESS column of the CLIENTS / SECURITY list. The same alias is then entered here. Define an individual Pretalk interface for the client with USE PRETALK.
- USE PRETALK: Only available if CLIENT = TAKE IT FROM LOCAL SETTINGS.
  - DEFAULT: The client uses the Pretalk interface defined on the CLIENTS AUDIO ASSIGNMENT configuration page.
  - PRETALK N: Select an individual Pretalk interface.

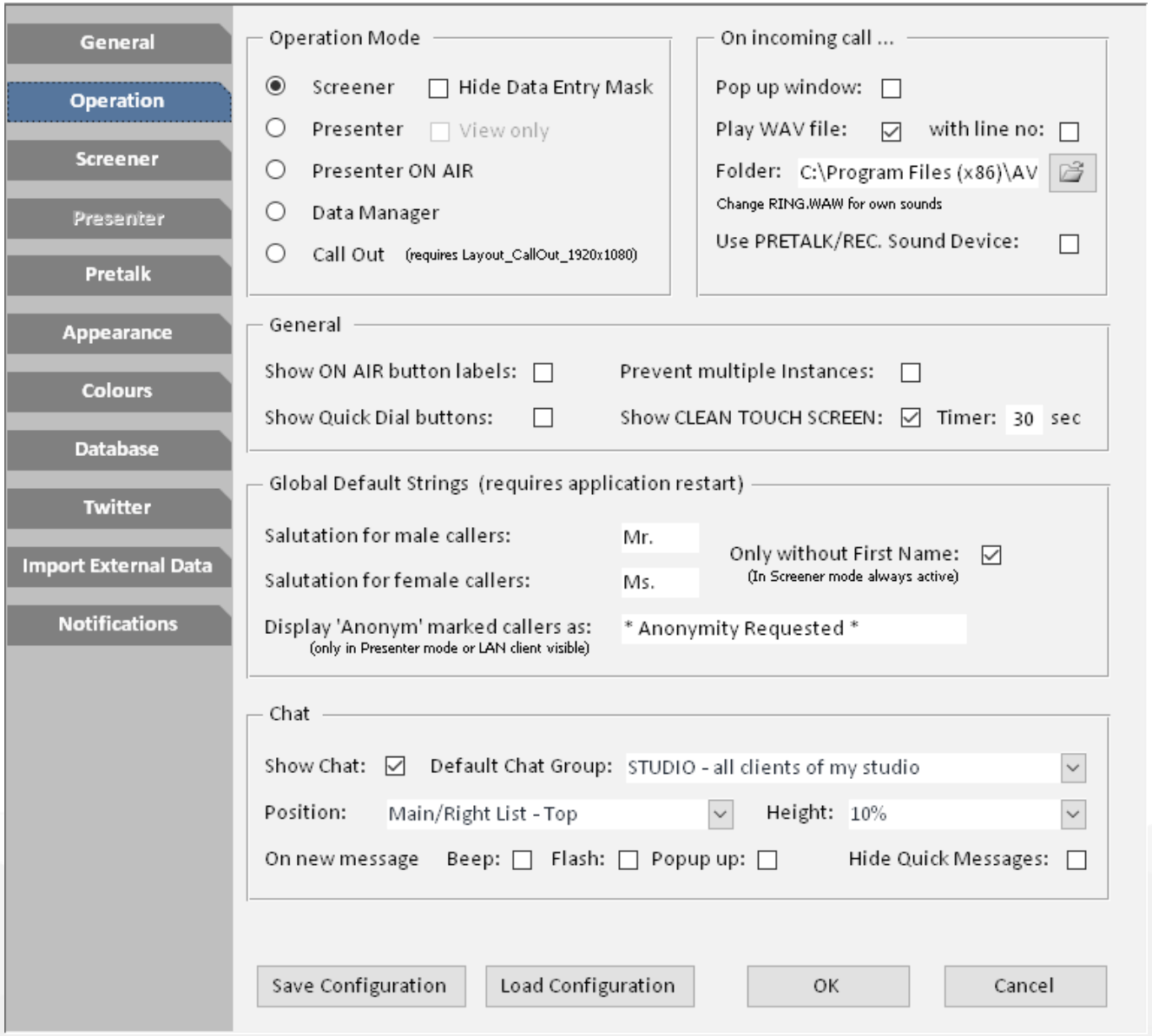
- LOGFILE: The Screener software writes one logfile per day. The file name ends with log-01.txt, log-02.txt, …. The number stands for the day of the month. So, the logfiles are overwritten each month.
  - LOGFILE FOLDER: Specify the folder to store the logfiles in.
  - BROWSE: Select the logfile folder from the file system.
  - OPEN: Press the button to open the logfile of the current day.
  - FILE NAME FORMAT: Specify the file name and optional subfolder.
    - Adding <screener> to the file name is recommended when LAN client and Screener use the same logfile folder.
    - Adding <computer name> to the path is recommended when the logfiles of several clients are written to a common network share.
  - DEFAULT EXPORT FOLDER: The Screener client can display several lists like Last Callers, Noted Callers, …. The lists can be exported to PDF or EXCEL files. Specify the folder where the exported files will be stored here.
    - BROWSE: Select the export folder from the file system.
  - E-MAIL ENABLED: Enables sending exported PDF or EXCEL files via E-Mail.

General (3)

- MASTER ABILITY ENABLED: Access to shared resources like the database or dynamic Hold files is managed by the master client. The master client is automatically determined by the system from all connected clients. If a client does not have access to shared resources, the master client ability should be deactivated for that client.
- LOGIN PASSWORD: Define a password to restrict access to the menu side bar. Only SYSTEM INFORMATION and SYSTEM MONITOR will be available without logging in.
- SAVE SETTINGS: Define the storage location of the local settings here.
  - Local settings include all settings in the LOCAL CONFIGURATION window.
  - The selected storage location determines which access rights are required to change the local settings.
  - Changing these settings may require administrator rights.

- Select a settings location:
  - FOR ALL USERS: All users of the PC use the same settings. Administrator rights are required to change the local settings. (C:\ProgramData\AVT\MAGIC THipPro Screener)
  - FOR CURRENT USER: The settings are saved in the user directory of the logged-in account and synchronized to other PCs in the domain. User rights are sufficient to change the local settings. (%APPDATA%\ROAMING\AVT\MAGIC THipPro Screener)
  - IN THIS FOLDER: The settings are saved in an adjustable folder path. The path is saved in the settings.ini file in the installation directory. The access rights of the folder determine who can change the Local Settings.
    - BROWSE: Select the storage location from the file system.

General (4)


General
Operation
Screener
Presenter
Pretalk
Appearance
Colours
Database
Twitter
Import External Data
Notifications
Operation Mode
Screener
Hide Data Entry Mask
Presenter
View only
Presenter ON AIR
Data Manager
Call Out
(requires Layout_CallOut_1920x1080)
On incoming call ...
Pop up window:
Play WAV file:
with line no:
Folder:
C:\Program Files (x86)\AV
Change RING.WAW for own sounds
Use PRETALK/REC. Sound Device:
General
Show ON AIR button labels:
Prevent multiple Instances:
Show Quick Dial buttons:
Show CLEAN TOUCH SCREEN:
Timer:
30
sec
Global Default Strings (requires application restart)
Salutation for male callers:
Mr.
Salutation for female callers:
Ms.
Only without First Name:
(In Screener mode always active)
Display 'Anonym' marked callers as:
(only in Presenter mode or LAN client visible)
* Anonymity Requested *
Chat
Show Chat:
Default Chat Group:
STUDIO - all clients of my studio
Position:
Main/Right List - Top
Height:
10%
On new message
Beep:
Flash:
Popup up:
Hide Quick Messages:
Save Configuration
Load Configuration
OK
Cancel

Operation (1)

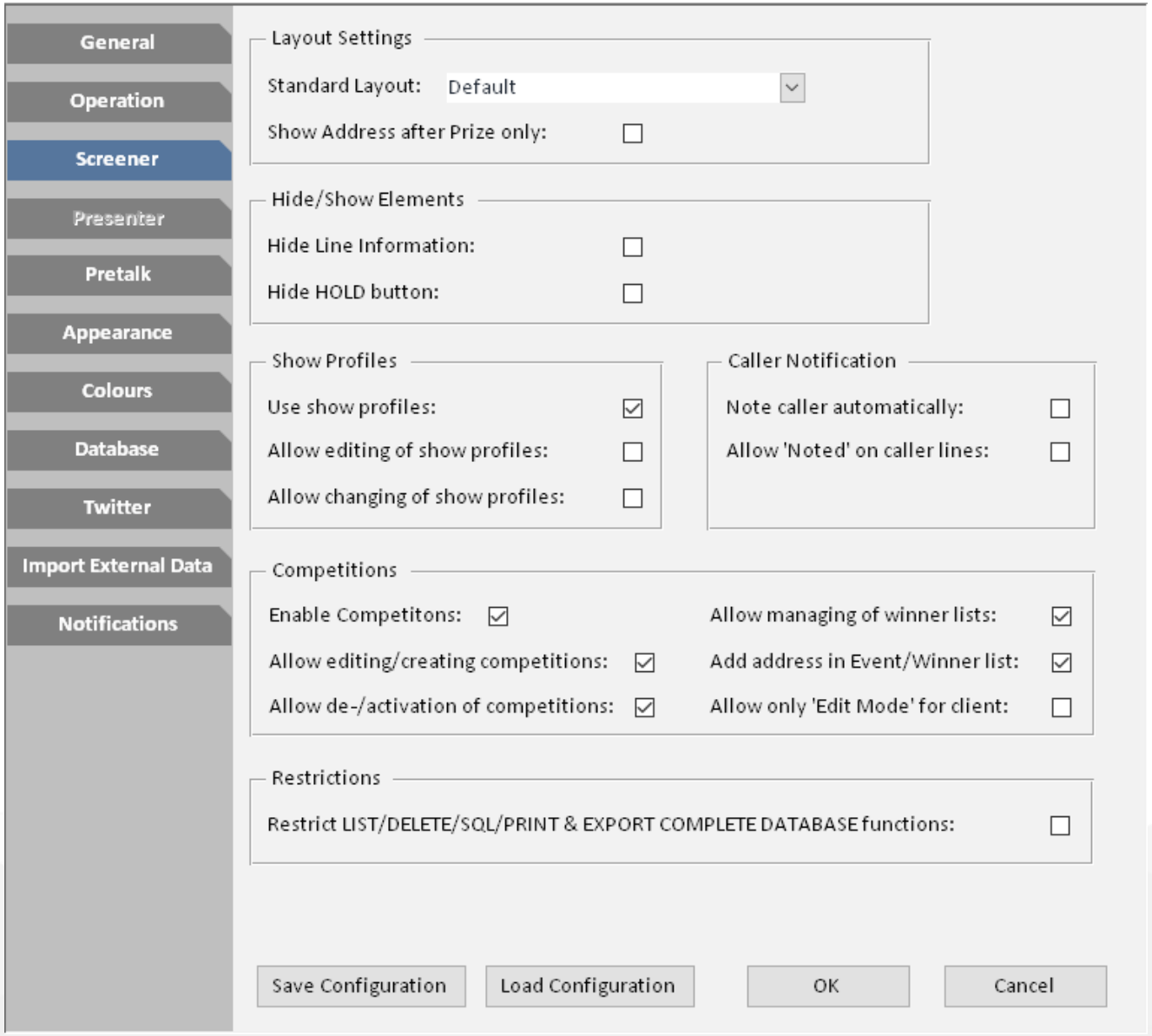
- Set the operation mode and further basic settings on the OPERATION page.
- OPERATION MODE: The Screener software provides several modes which are optimized for certain use cases.
  - SCREENER: Default mode. This mode is optimized for telephony and data acquisition and editing. Provides a Pretalk audio line, lists and the data entry mask.
    - HIDE DATA ENTRY MASK: The data entry mask can be disabled. Entering data on the line itself is still possible.
  - PRESENTER: This mode is optimized for displaying caller information and minimal interaction with the system for the user.
    - VIEW ONLY: The telephone lines cannot be controlled by the user. The Screener is just used to display caller information and line status.
  - PRESENTER ON AIR: Same as PRESENTER.
  - DATA MANAGER: This mode is optimized for editing caller information data. No telephone lines are displayed.
  - CALL OUT: Very similar to SCREENER. It displays only one ON AIR button and hides the HOLD button. The data entry mask allows direct access to up to six phone numbers per contact. The layout “Call Out 1920x1080” must used. (See SCREENER configuration page.)
- ON INCOMING CALL…: The Screener software can notify the user when a call comes in.
  - POP UP WINDOW: Brings the Screener window to the foreground.
  - PLAY WAV FILE: The screener plays an audio file specified under FOLDER on the default audio interface of the PC. The filename must be RING.WAV. It must be a PCM encoded file in WAVE file format.
    - WITH LINE NO: Enable this option if there is an individual audio file for each line. The file names must be RING1.WAV, RING2.WAV, … .
    - FOLDER: Specify the folder of the audio file. By default, the installation directory of the Screener software is used.
    - USE PRETALK / REC. SOUND DEVICE: The Screener plays the audio on the audio interface defined under PRETALK.

Operation (2)

- GENERAL
  - SHOW ON AIR BUTTON LABELS: By default, the Screener software shows AIR 1 or AIR 2 on the ON AIR buttons. Enable this option to show the labels defined on the MODE & AUDIO LINE page of the system configuration.
  - SHOW QUICK DIAL BUTTONS: Enable this option to display 16 quick dials on the dialog for manual dialling. Open the manual dialling dialog in the main window and click on a quick dial with the right mouse button to configure it. Click on it with the left mouse button to dial the number.
  - PREVENT MULTIPLE INSTANCES: Enable this option if the software should prevent that a second Screener software can be started on the PC.
  - SHOW CLEAN TOUCH SCREEN: Enable this option to show a button in the menu sidebar which allows for preventing any user input for a certain timespan. During this time the screen can be cleaned.
    - TIMER: Set the amount of time the screen ignores user input.

- GLOBAL DEFAULT STRINGS: Changes made here only take effect after restarting the Screener application.
  - SALUTATION FOR MALE CALLERS: Default: Mr.
  - SALUTATION FOR FEMALE CALLERS: Default: Ms.
  - ONLY WITHOUT FIRST NAME: Enable this option if the salutation should only be shown when the first name of the caller is not stored in the database. In Screener mode this is always active.
  - DISPLAY ‘ANONYM’ MARKED CALLERS AS: Enter the text that is displayed when a caller is stored in the database as anonymous. The text is only displayed in Presenter mode and in the LAN client.

- CHAT
  - The PC clients have an integrated chat function.
  - SHOW CHAT: Enable to access the chat on this client.
- DEFAULT CHAT GROUP: Select which group receives messages by this client by default. Other groups can be addressed using @<Group/User>:
  - @All or @Studio: All clients of a studio
  - @Screener: All Screener clients of a studio
  - @LAN: All LAN clients of a studio
  - @ChatName: Dedicated client
- POSITION: Define where the chat window is displayed:
  - RESIZABLE WINDOW: The chat is shown in an extra window floating on the screen. The chat window can be positioned and resized using the mouse. To open the chat window press CTRL + SHIFT + C.
  - DATA ENTRY MASK - BOTTOM: The chat is shown below the data entry mask on the right.
  - MAIN / RIGHT LIST – TOP: The chat is shown above the main list. If two lists are shown side by side it is shown above the right list.
  - LEFT LIST – TOP: If two lists are shown side by side, the chat is displayed above the left list.
- ON NEW MESSAGE: Define how a new chat message is signalled to the user.
  - BEEP:
  - FLASH: The frame of the chat window flashes in red.
  - POPUP UP: A window pops up informing the user.
- HIDE QUICK MESSAGES: There are three buttons at the bottom of the chat window. Right click on a button to define a quick message which is sent when clicking the button with the left mouse button. Enable this option to hide the quick message buttons.


General
Operation
Screener
Presenter
Pretalk
Appearance
Colours
Database
Twitter
Import External Data
Notifications
Layout Settings
Standard Layout: Default
Show Address after Prize only:
Hide/Show Elements
Hide Line Information:
Hide HOLD button:
Show Profiles
Use show profiles:
Allow editing of show profiles:
Allow changing of show profiles:
Caller Notification
Note caller automatically:
Allow 'Noted' on caller lines:
Competitions
Enable Competitons:
Allow editing/creating competitions:
Allow de-/activation of competitions:
Allow managing of winner lists:
Add address in Event/Winner list:
Allow only 'Edit Mode' for client:
Restrictions
Restrict LIST/DELETE/SQL/PRINT & EXPORT COMPLETE DATABASE functions:
Save Configuration
Load Configuration
OK
Cancel

Screener (1)

- LAYOUT SETTINGS: Define the layout of the data entry mask.
  - STANDARD LAYOUT: The Screener software comes with a variety of layouts for the data entry mask. The layout files are stored in the installation directory of the Screener software under \Layouts. To be able to select a layout here, the layout must be imported into the database first on the DATABASE configuration page. The layout DEFAULT is always available.
  - SHOW ADDRESS AFTER PRIZE ONLY: The address information fields (City, ZIP, Street) are not displayed until a prize is entered for a caller.
- HIDE / SHOW ELEMENTS: Modify the appearance of the phone lines.
  - HIDE LINE INFORMATION: Enable this option to hide the information field. on the phone lines.
  - HIDE HOLD BUTTON: Enable this option to hide the HOLD buttons on all lines.
- SHOW PROFILES: Show profiles help to group caller information when multiple shows use the same database. Show profiles are created using the Profile Editor. For each show a title and several topics can be defined. Enable the show profile via the SELECT SHOW PROFILE button above the data entry mask. When the show profile is active you can assign one of the predefined topics to each caller and also enter contact details and additional information.
  Callers which sound interesting can be noted by pressing the star icon in the data entry mask. An editor can then review all noted callers and decide whom will make it into the show. These callers are then added to the Call Back List by the editor. The other contacts are dismissed. During the show the presenter sees the Call Back List where the contacts are displayed along with the topic and the additional information. The presenter can select a contact and call the number.
  After the show the Show Profile can be deleted if desired. Optionally, the contacts associated with the Show Profile can be deleted as well.

Screener (2)

- USE SHOW PROFILE: Enable this option to make Show Profiles available for this Screener client.
- ALLOW EDITING OF SHOW PROFILES: Enable this option if this Screener client should display the Profile Editor. Find the Profile Editor under MENU – PROFILE EDITOR.
- ALLOW CHANGING OF SHOW PROFILES: Enable this option to allow this Screener client to activate a Show Profile via the SELECT SHOP PROFILE button above the data entry mask.

- CALLER NOTIFICATION: A User can mark a caller by enabling the star icon in the data entry mask. This puts the caller on the Noted Callers list. An editor can later decide if that caller qualifies to be called back during the show. If that is the case the editor puts the caller on the Call Back list. Otherwise, the Noted status should be removed.
  - NOTE CALLER AUTOMATICALLY: A caller is noted automatically when changes to the Show Details of the caller are made in the data entry mask.
  - ALLOW 'NOTED' ON CALLER LINES: Enable to display the star icon on the phone lines as well.

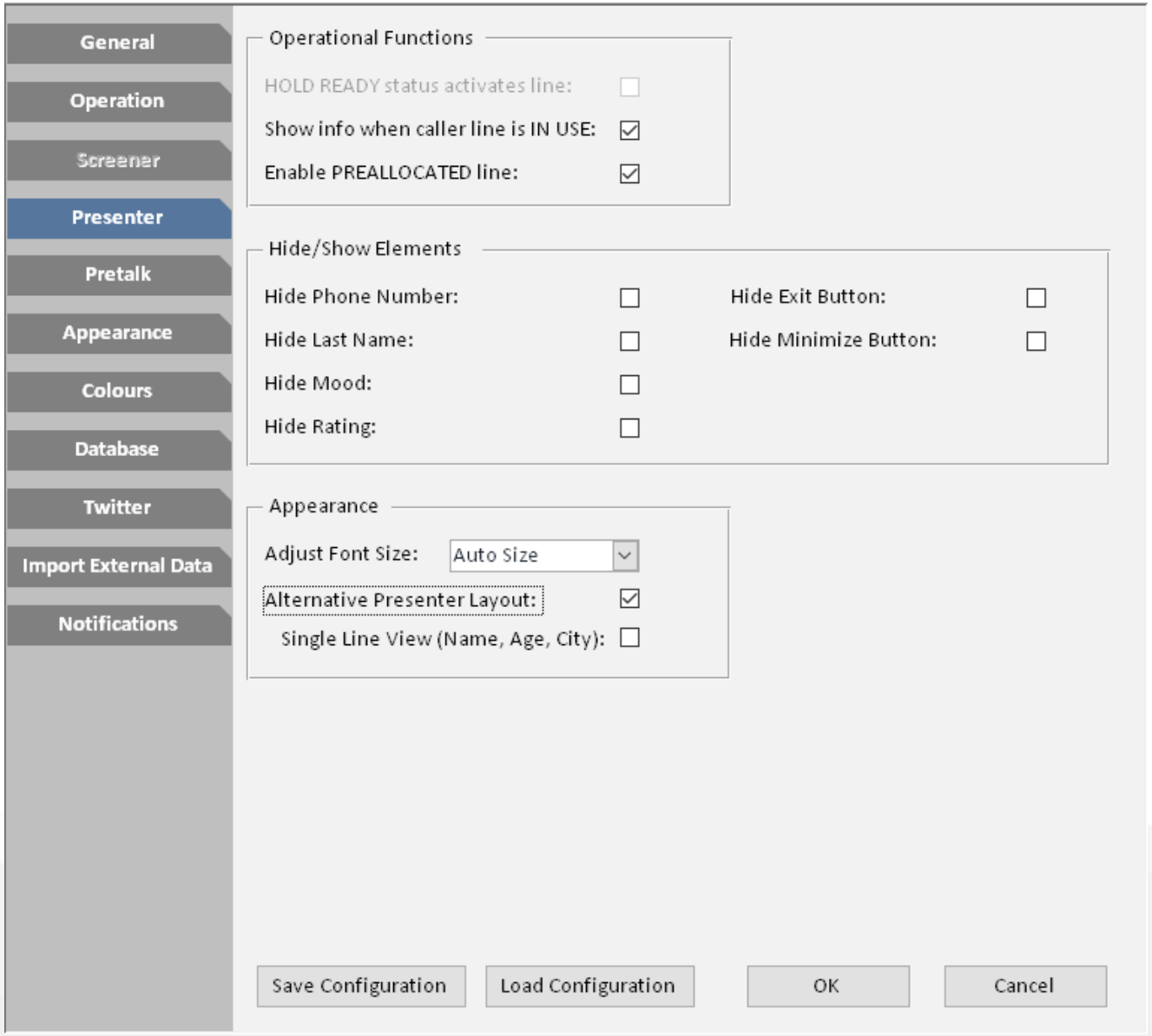
- Competitions: It is possible to manage a whole competition with the Screener application. Use the Competition Editor to create and edit competitions. Find the Competition Editor under the three-dot menu of the Competitions list.
  If, for example, there is a lottery for concert tickets, a Screener user can enter the date, time and location of the event, the available ticket contingent and the number of tickets a winner will receive by default. Tickets for internal purposes can also be reserved here. The ticket price can also be entered for accounting. After the competition is finished the results and winners can be printed for the event team or for accounting.
  - ENABLE COMPETITIONS: Enable the competitions feature for this client.
  - ALLOW EDITING /CREATING COMPETITIONS: Enable the competition editor for this client.
  - ALLOW DE- / ACTIVATION OF COMPETITIONS: Enable this option to allow this client to activate or deactivate a competition.

Screener (3)

- ALLOW MANAGING OF WINNER LISTS: Enable this option if the user should be able to use the right mouse button in the Winner list, e.g., to delete a winner.
- ADD ADDRESS IN EVENT / WINNER LIST:
- ALLOW ONLY ‘EDIT MODE’ FOR CLIENT: The client cannot start, end or continue a competition. Only the Edit mode is available which allows for editing the winner’s information and the prizes won.

- RESTRICT LIST/DELETE/SQL/PRINT & EXPORT COMPLETE DATABASE FUNCTIONS: Enable this option if this client should not be allowed to:
  - DELETE LISTS
  - SHOW THE PHONEBOOK LIST
  - SHOW THE FLAGGED CALLERS LIST
  - SHOW THE GLOBAL SEARCH LIST

Screener (4)


General
Operation
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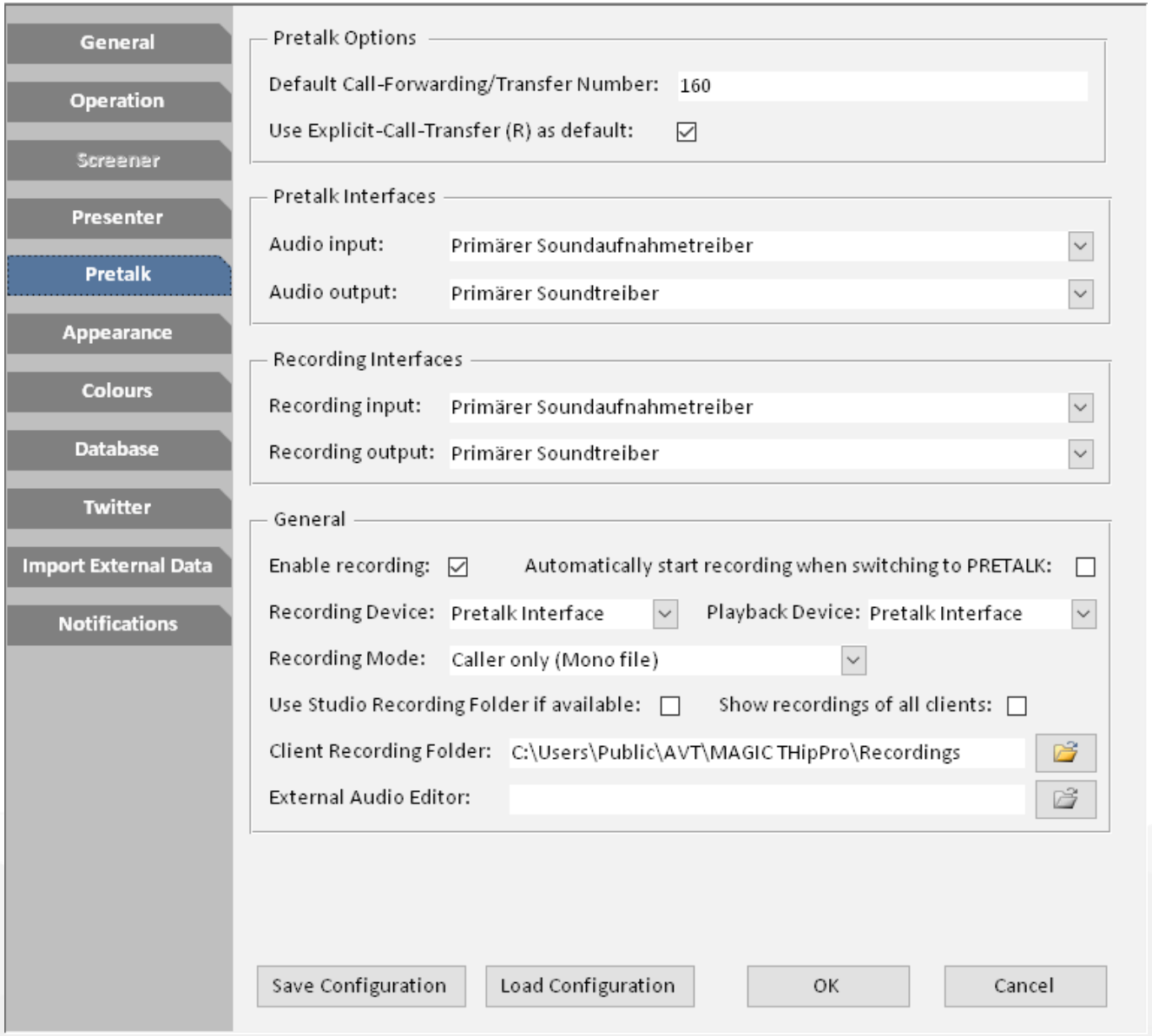
Pretalk
Appearance
Colours
Database
Twitter
Import External Data
Notifications
Operational Functions
HOLD READY status activates line:
Show info when caller line is IN USE:
Enable PREALLOCATED line:
Hide/Show Elements
Hide Phone Number:
Hide Last Name:
Hide Mood:
Hide Rating:
Hide Exit Button:
Hide Minimize Button:
Appearance
Adjust Font Size:
Auto Size
Alternative Presenter Layout:
Single Line View (Name, Age, City):
Save Configuration
Load Configuration
OK
Cancel

Presenter (1)

- OPERATIONAL FUNCTIONS:
  - HOLD READY STATUS ACTIVATES LINE: Deprecated. Configuration moved the CLIENT RESTRICTIONS – ACTIVATE LINE in the MAGIC THIpPro configuration.
  - SHOW INFO WHEN CALLER LINE IS IN USE: A line is displayed as IN USE when the caller is not ON AIR. Enable this option to show the caller information also when the caller is not ON AIR.
  - ENABLE PREALLOCATED LINE: If this option is enabled a phone line with a preallocated caller is active and the number can be dialled. Disable this option to show a phone line with a preallocated caller as IN USE. The number can not be dialled.
- HIDE / SHOW ELEMENTS: Define which information or buttons should be visible:
  - HIDE PHONE NUMBER
  - HIDE LAST NAME
  - HIDE MOOD
  - HIDE RATING
  - HIDE EXIT BUTTON
  - HIDE MINIMIZE BUTTON
- APPEARANCE: Define who the caller information is presented to the user.
  - ADJUST FONT SIZE: Set the font size used for displaying caller information.
    - AUTO SIZE: The application decides on the font size depending on screen space and length of the information for each line independently.
    - FIX SIZE: The application decides on the font size used on all lines depending on screen space.
    - MAX. SIZE = N: Uses AUTO SIZE with the font size limited to N.
  - ALTERNATIVE PRESENTER LAYOUT: The default layout shows name and number of the caller on the left and the caller information on the right of the phone line. Enable the alternative layout to display the caller's name and number at the top and the information field at the bottom of the phone line.
    - SINGLE LINE VIEW (NAME, AGE, CITY): Enable to show name, age, and city in one line.

Presenter (2)


General
Operation
Screener
Presenter
Pretalk
Appearance
Colours
Database
Twitter
Import External Data
Notifications
Pretalk Options
Default Call-Forwarding/Transfer Number: 160
Use Explicit-Call-Transfer (R) as default:
Pretalk Interfaces
Audio input: Primärer Soundaufnahmetreiber
Audio output: Primärer Soundtreiber
Recording Interfaces
Recording input: Primärer Soundaufnahmetreiber
Recording output: Primärer Soundtreiber
General
Enable recording:
Automatically start recording when switching to PRETALK:
Recording Device: Pretalk Interface
Playback Device: Pretalk Interface
Recording Mode: Caller only (Mono file)
Use Studio Recording Folder if available:
Show recordings of all clients:
Client Recording Folder: C:\Users\Public\AVT\MAGIC THipPro\Recordings
External Audio Editor:
Save Configuration
Load Configuration
OK
Cancel

Pretalk (1)

- PRETALK OPTIONS: Define how calls can be transferred by the Screener.
  - DEFAULT CALL FORWARDING / TRANSFER NUMBER: If this field is empty, the user must enter the number the call should be transferred to. If a number is entered, clicking on the call transfer button on the main panel transfers the call automatically to that number. Click the call transfer button on the main panel with the right mouse button to enter the call transfer destination manually.
  - USE EXPLICIT-CALL-TRANSFER (R) AS DEFAULT: With explicit call transfer (ECT), the call transfer is done by the PBX or the provider. Disable this option if the THipPro has Call Forwarding lines configured on the LINE INTERFACE configuration page.
- There are two ways of using the built-in audio interfaces of the PC for Pretalk with a caller on the THipPro.

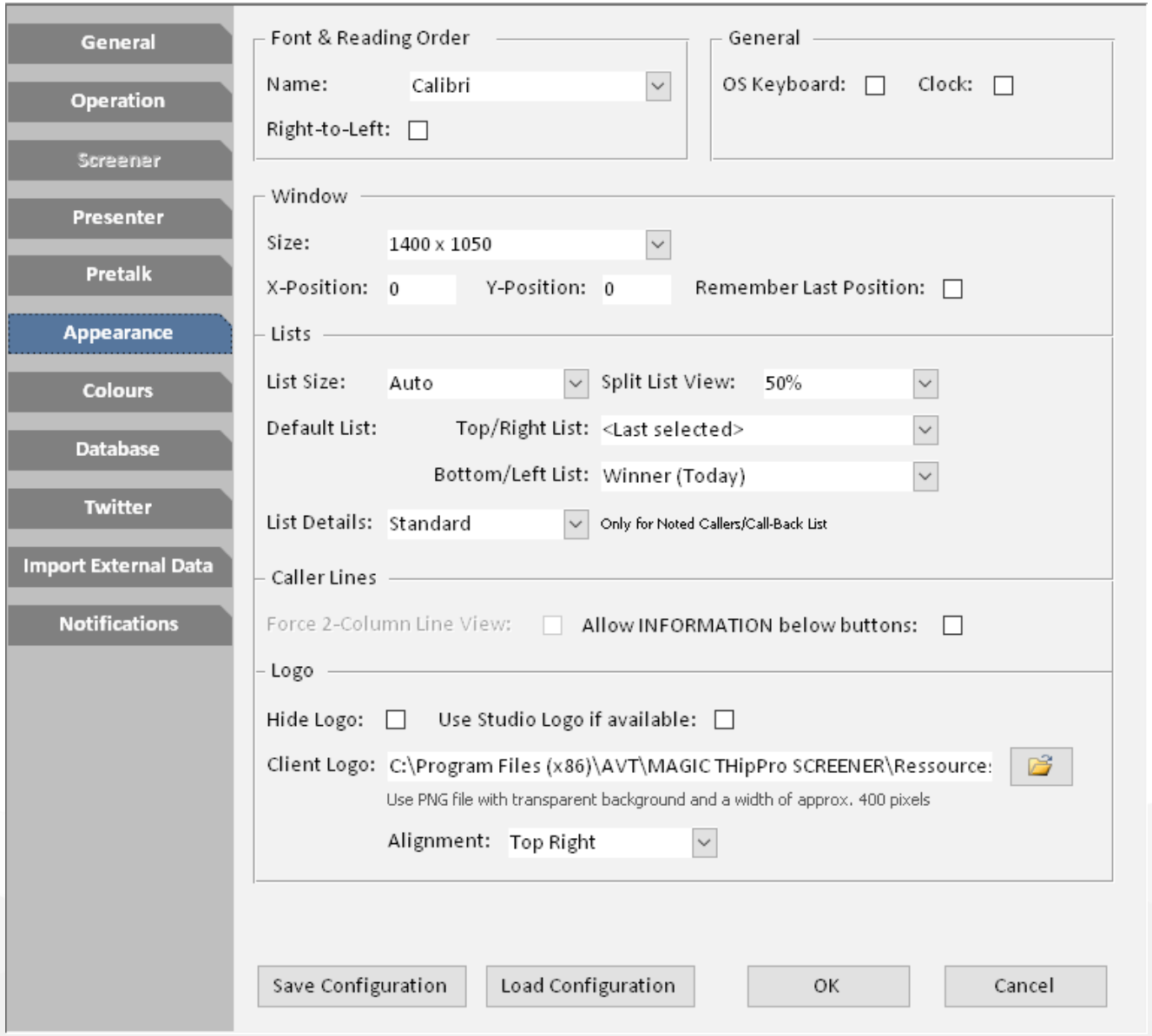
- PRETALK STREAMING
  - Can be used for Pretalk or as audio interface for the answering machine. (See CONFIGURATION - ANSWERING MACHINE for more details.)
  - The audio signal of an audio input of the PC is streamed to the THipPro by the LAN Client.
  - The THipPro streams the audio signal of the caller to the PC.
  - The LAN client outputs the audio signal of the caller to an audio interface of the PC.
  - A Pretalk streams is either fixed, where there is a permanent stream between the PC and the THipPro, or dynamic, where the LAN client requests a stream from the THipPro when needed.
  - The audio signals of the caller and the user can also be recorded by the LAN client.
  - The RECORD button on the LAN client is only available when at least one call is in Pretalk.

Pretalk (2)

- PRETALK RECORDING
  - Can be used if the audio signals are transmitted between THipPro and PC via the audio interfaces of the THipPro (analogue, AES/EBU, AES67, Dante, Ravenna).
  - The LAN client can record the audio signal from the audio input of the PC.
  - The LAN client can use an audio output of the PC to play back the recordings.
  - The RECORD button on the LAN client is always available.
- PRETALK INTERFACES: Select the audio interfaces for audio input and audio output when using Pretalk Streaming at this client.
- RECORDING INTERFACES: Select the audio interfaces for audio input and audio output when using the Pretalk Recording at this client.
- GENERAL:
  - ENABLE RECORDING: Enable this option to display the RECORD button on the main panel.
  - AUTOMATICALLY START RECORDING WHEN SWITCHING TO PRETALK: Enable this option to start recording automatically whenever a caller is put in Pretalk.
  - RECORDING DEVICE: Define whether Pretalk Streaming or Pretalk Recording should be used for capturing audio.
  - PLAYBACK DEVICE: Define whether Pretalk Streaming or Pretalk Recording should be used to playback recordings.
  - RECORDING MODE: Define the content and the format of the recordings:
    - CALLER ONLY (MONO FILE): Only the audio signal of the caller is recorded and written to a mono audio file.
    - CALLER & SCREENER (STEREO FILE): The audio signals of the caller and the user of the LAN client are recorded and written to separate channels of a stereo audio file.
    - CALLER & SCREENER (MONO FILE): The audio signals of the caller and the user of the LAN client are recorded and mixed into a mono audio file.

Pretalk (3)

- USE STUDIO RECORDING FOLDER IF AVAILABLE: Enable this option if the recordings should be stored in the Recording folder which is defined on the STUDIO SETTINGS configuration page of the THipPro. If the studio recording folder is not available for the Screener client it will use the CLIENT RECORDING FOLDER.
- SHOW RECORDINGS OF ALL CLIENTS: By default, the Screener client displays only the recordings created by itself in the Recordings list. Enable this option to display all recordings present in the recording folder used by the Screener client.
- CLIENT RECORDING FOLDER: Specify the folder where recordings should be stored. This could be a local folder or a network share. Use the BROWSE button to select a folder from the file system.
- EXTERNAL AUDIO EDITOR: Define an external audio editor. Display the Recordings list. Click on a recording with the right mouse button and click EDIT to open the recording in the specified audio editor.



Appearance (1)

- FONT & READING ORDER: Define how text is displayed on the main panel of the Screener application.
  - NAME: Select a font from a small selection of fonts installed in your system.
  - RIGHT-TO-LEFT: Enable to display contact information right aligned.
- GENERAL
  - OS KEYBOARD: Enable to make use of the Windows 10 On Screen Keyboard when editing text.
  - CLOCK: Enable to display the time on the menu bar at the top of the main panel.
- WINDOW
  - SIZE : Define the size of the main window.
    - AUTO: The screener window will automatically take up the whole screen of the active monitor.
    - CUSTOM: Define your own window size
      - WIDTH: Enter the width of the window in pixels.
      - HEIGHT: Enter the height of the window in pixels.
    - PRE-DEFINED: Select one of the pre-defined window sizes.
  - X-POSITION : Define the horizontal position of the main panel on the screen in pixels. 0 is the left border of the screen.
  - Y-POSITION : Define the vertical position of the main panel on the screen in pixels. 0 is the top border of the screen.
  - REMEMBER LAST POSITION: The screeners main window can be dragged around on the screen using the grip symbol (⇿) in the top right corner. If you enable this option, the sreener window will open at the same position it was when the application was closed.

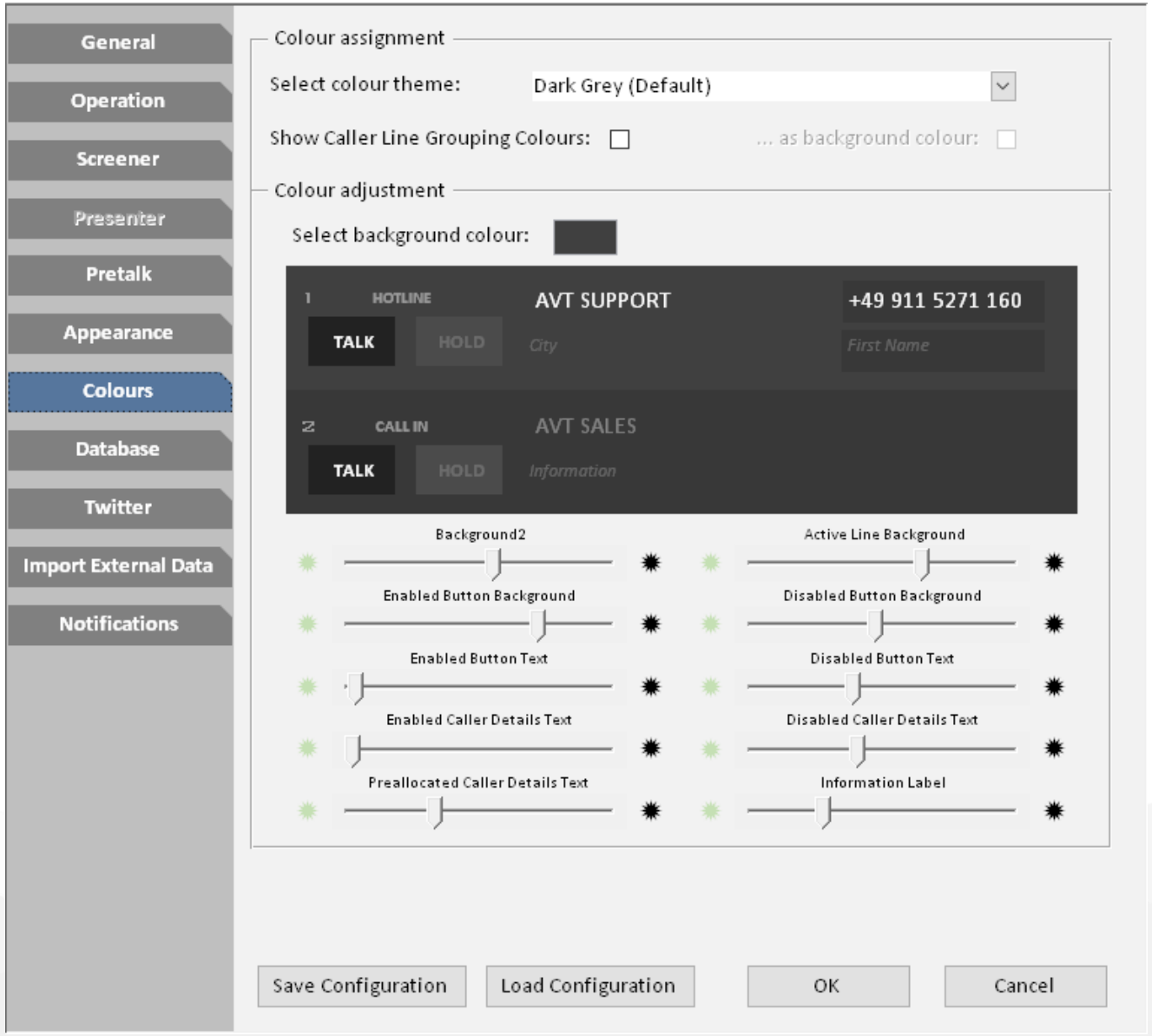
Appearance (2)

- LISTS: Define how lists like „Last Calls“ or „Phone Book“ are displayed on the main panel.
  - LIST SIZE: Set the width of the lists relative to the width of the main panel.
  - SPLIT LIST VIEW: Define how two lists are arranged on the main panel.
    - OFF: Only one list is displayed.
    - SIDE-BY-SIDE: The lists are displayed next to each other.
    - PERCENTAGE: The lists share one column. Select a percentage to define how much space the upper list takes up.
  - DEFAULT LIST: Define what the lists display when starting the screener application. The content of the list can be changed by the user during operation by clicking the header of a list and selecting a type from a pop up. You can set the content type for:
    - TOP/RIGHT LIST
    - BOTTOM / LEFT LIST
- LIST DETAILS: Define how much information is displayed in the “Noted Caller” list and in the “Call-Back” list:
  - STANDARD
  - EXTENDED
  - MINIMIZED
- CALLER LINES: The software places the caller lines automatically depending on number of lines displayed and available space. Here you can influence the arrangement.
  - FORCE 2-COLUMN LINE VIEW: Caller lines are displayed in two columns next to each other.
  - ALLOW INFORMATION BELOW BUTTONS: The information field is displayed below the audio line buttons instead of next to them.

Appearance (3)

- LOGO: The Screener software can display a custom logo in the top right corner if there is enough space in the top menu bar. The recommended format is PNG with 400x200 pixels and transparent background.
  - HIDE LOGO: Disables the logo.
  - USE STUDIO LOGO IF AVAILABLE: Enable this option to display the logo defined in the configuration of the MAGIC THipPro on the STUDIO SETTINGS configuration page. The studio logo is displayed if the path is available for the client.
  - CLIENT LOGO: Define the logo locally if the studio logo cannot be used.
  - ALIGNMENT: If the logo is smaller than the space reserved, you can define how the logo is positioned:
    - TOP LEFT
    - TOP RIGHT
    - CENTER
    - BOTTOM LEFT
    - BOTTOM RIGHT

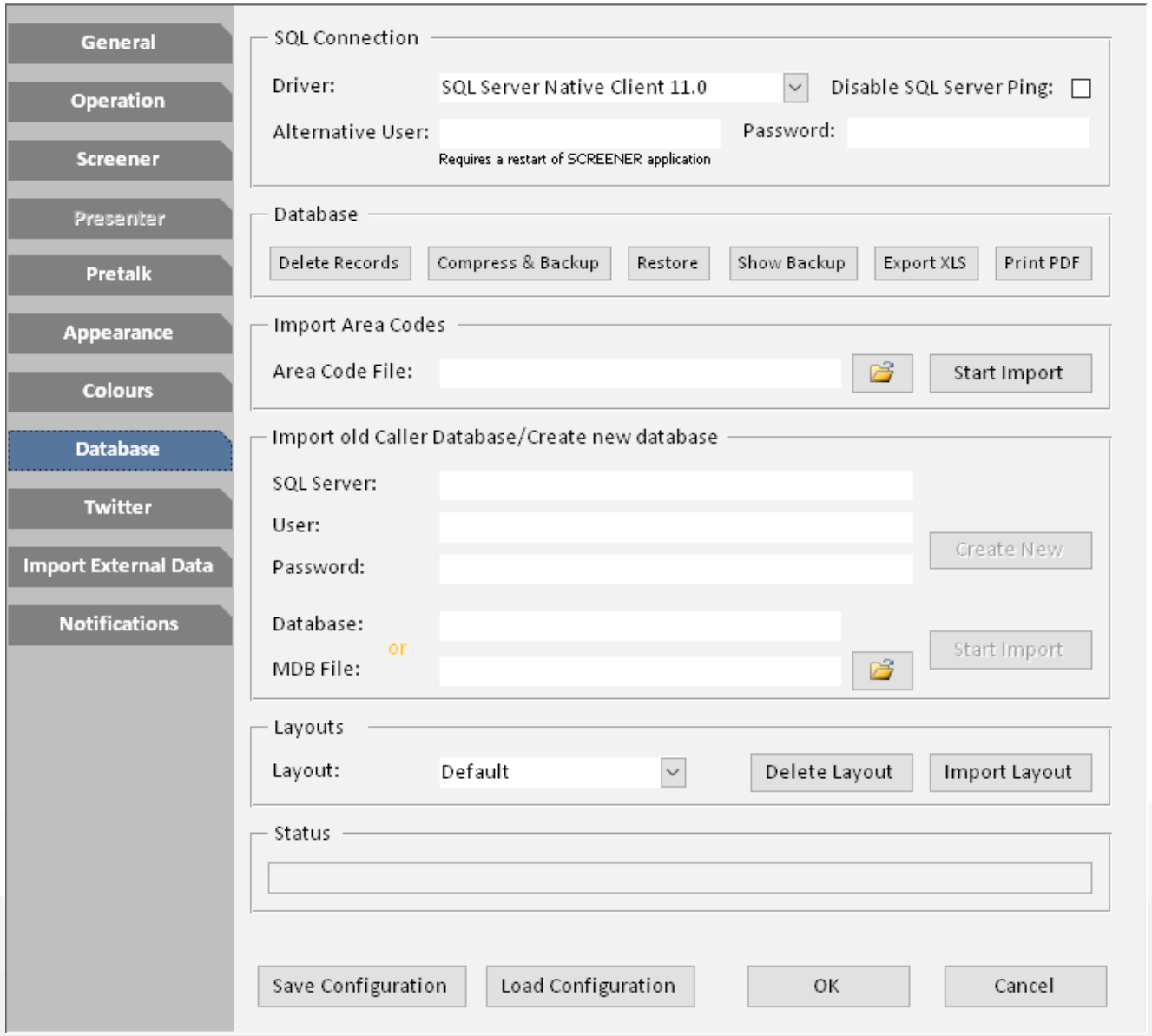
Appearance (4)


General
Operation
Screener
Presenter
Pretalk
Appearance
Colours
Database
Twitter
Import External Data
Notifications
Colour assignment
Select colour theme:
Dark Grey (Default)
Show Caller Line Grouping Colours:
... as background colour:
Colour adjustment
Select background colour:
1 HOTLINE
AVT SUPPORT
+49 911 5271 160
TALK
HOLD
City
First Name
2 CALL IN
AVT SALES
TALK
HOLD
Information
Background2
Active Line Background
Enabled Button Background
Disabled Button Background
Enabled Button Text
Disabled Button Text
Enabled Caller Details Text
Disabled Caller Details Text
Preallocated Caller Details Text
Information Label
Save Configuration
Load Configuration
OK
Cancel

Colours (1)

- COLOUR ASSIGNMENT
  - SELECT COLOUR THEME: Select one of the preinstalled colour themes. A preview is shown in the COLOUR ADJUSTMENT section.
  - SHOW CALLER LINE GROUPING COLOURS: Display the caller line colours as a fine line next to the audio line buttons of each line. The colours are defined on the CALLER LINE GROUPING configuration page of the MAGIC THipPro.
  - … AS BACKGROUND COLOUR: Change the background colour of the whole line to the line group colour.
- Colour adjustment: Create your custom design here. The live preview in the middle of the screen shows how any changes made here affect the main panel.
  - SELECT BACKGROUND COLOUR: Define the background colour of the main panel. The colours of all elements of the page are derived from this colour.
  - SLIDERS: Use the sliders to adjust the brightness of specific elements of the main panel.

Colours (2)


General
Operation
Screener
Presenter
Pretalk
Appearance
Colours
Database
Twitter
Import External Data
Notifications
SQL Connection
Driver:
SQL Server Native Client 11.0
Disable SQL Server Ping:
Alternative User:
Password:
Requires a restart of SCREENER application
Database
Delete Records
Compress & Backup
Restore
Show Backup
Export XLS
Print PDF
Import Area Codes
Area Code File:
Start Import
Import old Caller Database/Create new database
SQL Server:
User:
Password:
Create New
Database:
or
MDB File:
Start Import
Layouts
Layout:
Default
Delete Layout
Import Layout
Status
Save Configuration
Load Configuration
OK
Cancel

Database (1)

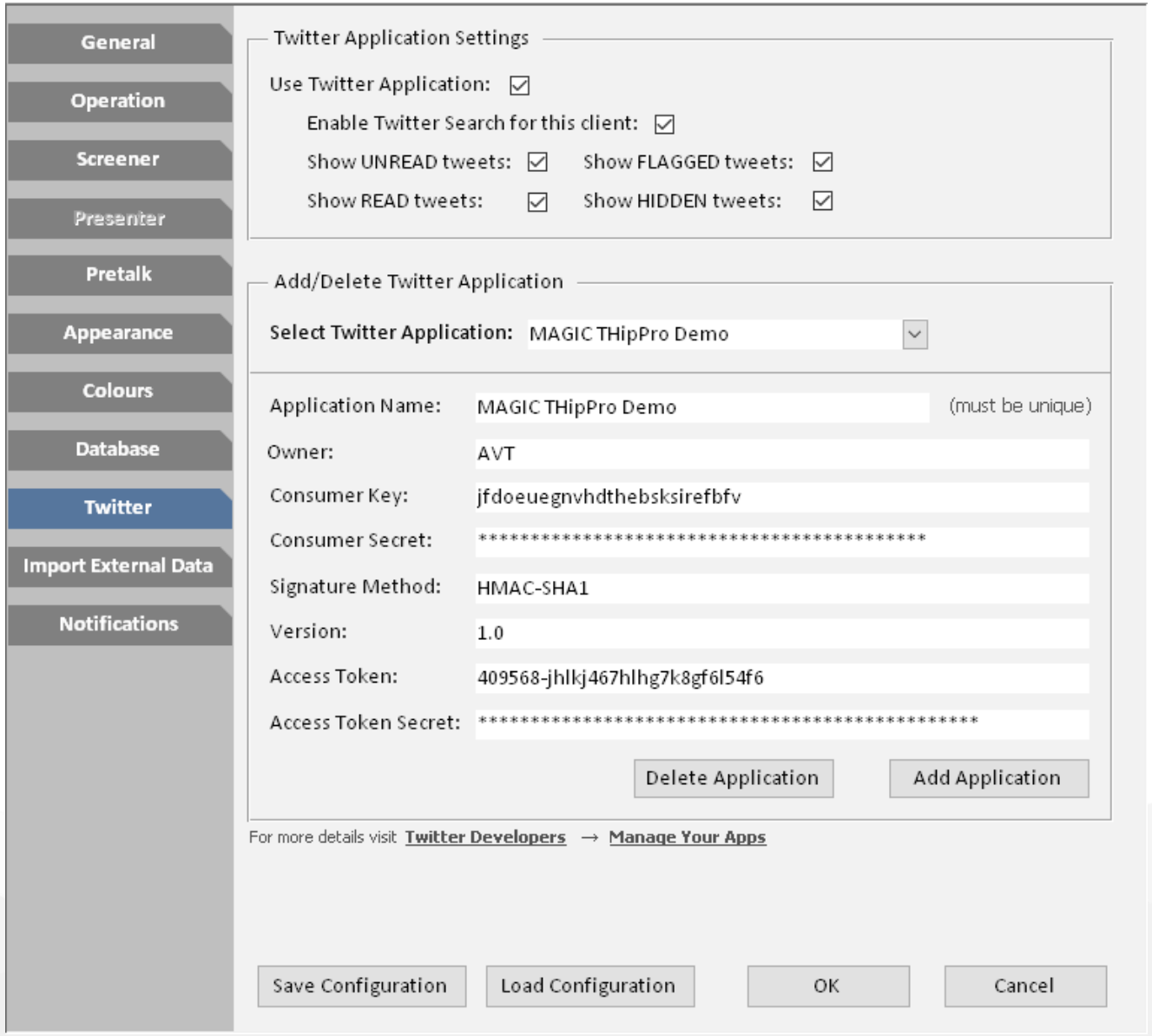
- The SQL database holds the phonebook as well as area codes and Screener data input mask layouts.
- SQL CONNECTION: Define how the Screener software connects to the SQL database.
  - DRIVER: Select one of the installed SQL client drivers.
  - DISABLE SQL SERVER PING: The Screener software sends ICMP Echo Requests (ping) to the database server to check whether the server is available. Disable this option if these are blocked in your network.
  - ALTERNATIVE USER: By default, the Screener software uses the login credentials configured on the DATABASE configuration page of the THipPro. Enter a user name here, if you want to use a different login.
  - PASSWORD: Enter the password of the alternative user.
- DATABASE: Offers maintenance tools for the SQL database. The SQL Command Line Utilities must be installed on the PC.
  - DELETE RECORDS: Deletes all contacts from the phone book.
  - COMPRESS & BACKUP: Optimizes the disk space used by the database and creates a backup of the database.
  - RESTORE: Restores the phone book from a backup file.
  - SHOW BACKUP: Opens the folder where the backup file is located in a windows explorer window.
  - EXPORT XLS: Export the phone book to an Excel file.
  - PRINT PDF: Print the phone book to a PDF file.
- IMPORT AREA CODES: Find area code files for some countries in the installation folder of the Screener software. Press the BROWSE button to select an area code file and press START IMPORT to import the area codes into the database.
  - You may create and import your own area code files following the example of the included files.

Database (2)

- IMPORT OLD CALLER DATABASE / CREATE NEW DATABASE: Import contacts from a MAGIC Touch database or create a new database here.
  - SQL SERVER: Enter the path to the SQL server were a new database should be created.
  - USER: Enter the login for the SQL server.
  - PASSWORD: Enter the password of the login.
  - DATABASE: Enter a database name. (Avoid special characters or spaces.)
  - CREATE NEW: Press to create a new database using the parameters given above.
  - MDB FILE: To import a database of the old AVT MAGIC Touch system, select the database file and press START IMPORT.
    - The data will be imported into the database configured on the DATABASE configuration page of the THipPro.
    - Existing entries are not overwritten.

- LAYOUTS: There are multiple layouts for the data input mask at the right of the main panel. Find predefined layouts in the installation directory of the Screener software. Only layouts stored in the database are available for the Screener. Manage the layouts here.
  - LAYOUT: Displays all layouts which are installed in the database.
  - DELETE LAYOUT: Erase the layout selected under LAYOUT from the database.
  - IMPORT LAYOUT: Import a layout into the database. Find the predefined layouts in the installation directory of the Screener Software.
    - It is not possible to customize existing layouts or create new layouts.
    - Activate a layout on the SCREENER configuration page.
    - Use the PROFILE EDITOR in the menu side-bar to assign a layout to a show profile.
- STATUS: Displays the progress of any database operation started on this page.

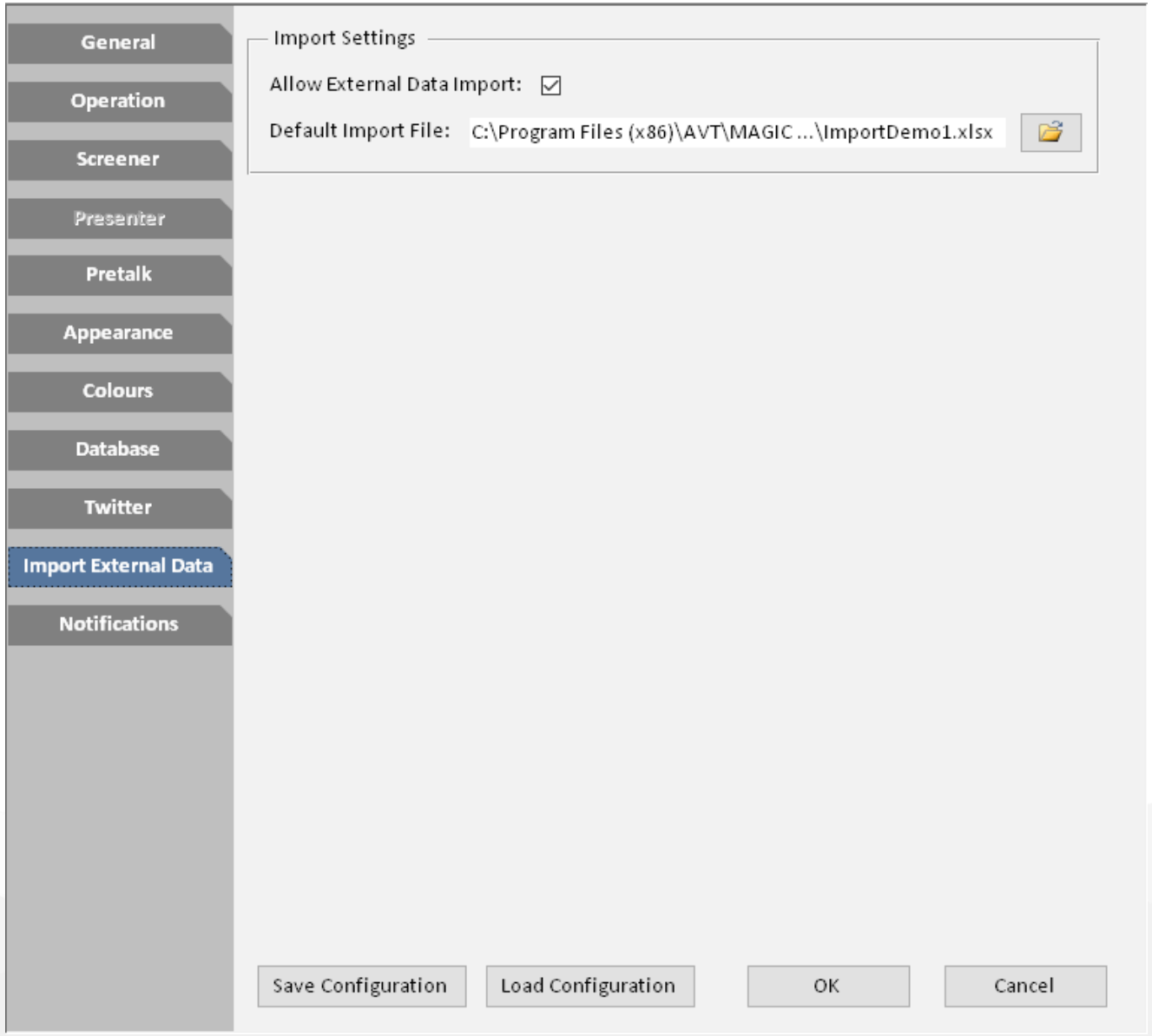
Database (3)


General
Operation
Screener
Presenter
Pretalk
Appearance
Colours
Database
Twitter
Import External Data
Notifications
Twitter Application Settings
Use Twitter Application:
Enable Twitter Search for this client:
Show UNREAD tweets:
Show FLAGGED tweets:
Show READ tweets:
Show HIDDEN tweets:
Add/Delete Twitter Application
Select Twitter Application: MAGIC THipPro Demo
Application Name: MAGIC THipPro Demo
(must be unique)
Owner: AVT
Consumer Key: jfdoeuegnvhdthebsksirefbfv
Consumer Secret: **********
Signature Method: HMAC-SHA1
Version: 1.0
Access Token: 409568-jhlkj467hlhg7k8gf6l54f6
Access Token Secret: **********
Delete Application
Add Application
For more details visit Twitter Developers → Manage Your Apps
Save Configuration
Load Configuration
OK
Cancel

Twitter (1)

- TWITTER APPLICATION SETTINGS: The MAGIC Screener software can display a twitter feed on the main panel if the SOCIAL MEDIA licence is installed on the MAGIC THipPro.
  - USE TWITTER APPLICATION: Enable the Twitter list on the main panel.
  - The Twitter list can be customized for each client:
    - ENABLE TWITTER SEARCH FOR THIS CLIENT
    - SHOW UNREAD TWEETS
    - SHOW READ TWEETS
    - SHOW FLAGGED TWEETS
    - SHOW HIDDEN TWEETS
- ADD / DELETE TWITTER APPLICATION: Twitter offers an API to access ones Twitter account using a custom app instead of the Twitter app. Register on developer.twitter.com to apply for Twitter API login.
  - SELECT TWITTER APPLICATION: Displays a list of installed Twitter logins. Select a login to display the details below.
  - DELETE APPLICATION: Delete the selected application.
  - ADD APPLICATION: Fill in the login details above and press this button to install the Twitter login.

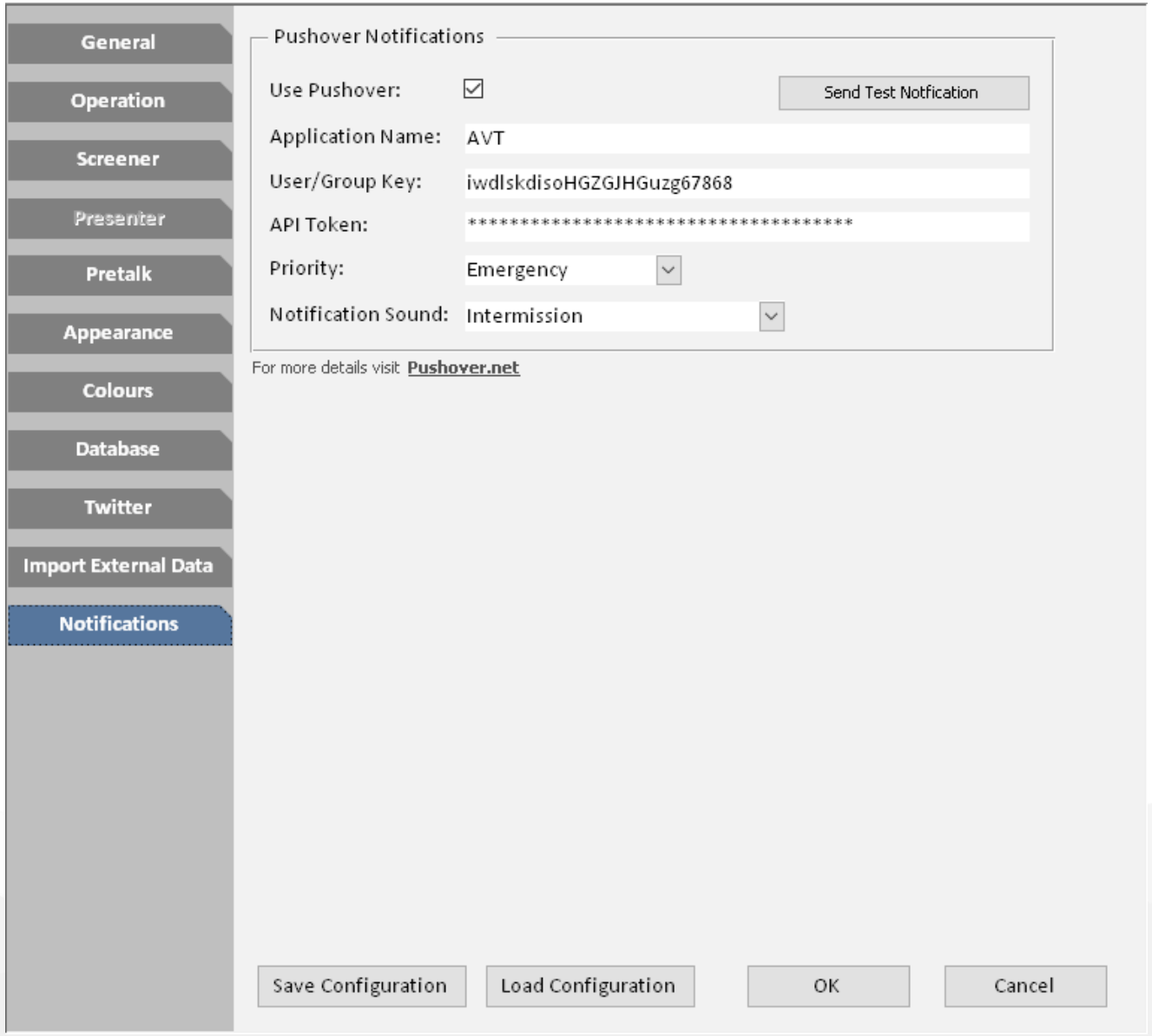
Twitter (2)



Import External Data (1)

- The Screener Software can be used to import contacts from a Microsoft Excel or text file into the phone book database. Define the parameters of the import on this page. The import itself is started via the side-bar menu of the Screener software.
  - ALLOW EXTERNAL DATA IMPORT: Enable this option to display IMPORT EXTERNAL DATA on the menu side-bar of the Screener software.
  - DEFAULT IMPORT FILE: Set the path of the file holding the data which should be imported.
  - An Excel or text file must be accompanied by a corresponding *.ini file with the exact same file name. The ini file holds some import parameters and a definition of the data columns in the Excel or text file.
  - Find example files in the installation directory of the MAGIC THipPro Screener software.

Import External Data (2)



Notifications (1)

- The Screener software can send notifications to the Pushover app which is available in the Google Play Store and in the Apple Store. There is also a Web application available for Google Chrome, Mozilla Firefox and Apple Safari.
- Notifications will be sent for:
  - Result of data import
  - Result of data export
  - Result of SQL user script (Press Ctrl+Q to enter the SQL Query and Script Manager from the main panel.)
- The notifications are displayed in the app until they are confirmed.
- Create your Pushover account at www.pushover.net and enter the API details here.

Notifications (2)

MAGIC THipPro

Maintenance

- Using the MAGIC LAN Client or MAGIC Screener Client PC software

info@avt-nbg.de
www.avt-nbg.de

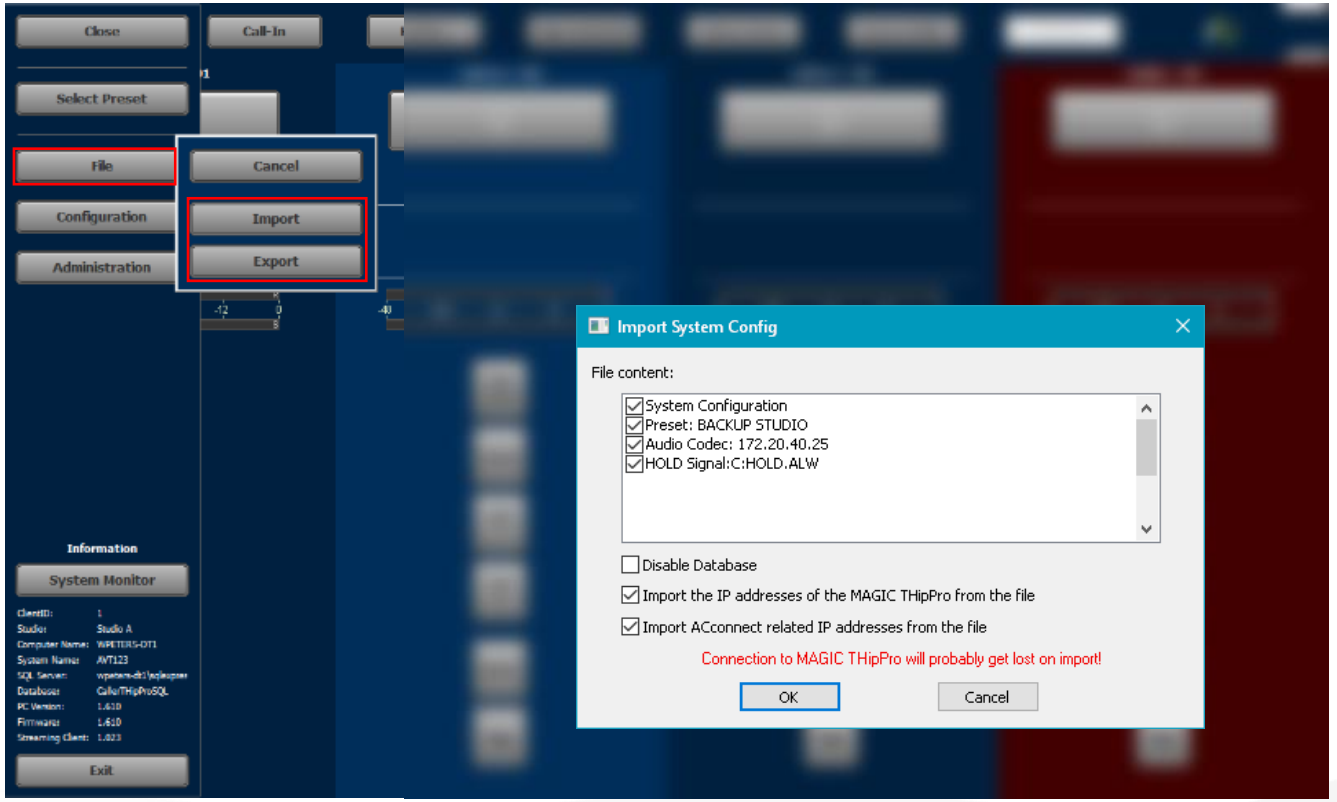
Create/load and manage Presets (1)

- PRESETS allow for storing parts of the system configuration on the THipPro.
- Users can load PRESETS during operation.
- Loading a PRESET overwrites the current system configuration.
- Two types of PRESETS are available:
  - PRESET: Contains all configuration pages in the OPERATION SETTINGS branch.
  - SUPER PRESET: Contains all configuration pages in the OPERATION SETTINGS branch and SYSTEM SETTINGS branch.
- ADMINISTRATORS can:
  - Load presets.
  - Save presets.
  - Manage presets via MENU → CONFIGURATION → MANAGE PRESETS.

- Load presets via MENU → SELECT PRESET.
  - Access to loading of PRESETS can be restricted by setting a USER PASSWORD in the configuration.
- In the MAGIC Screener software, SELECT PRESET is located in the top bar.
  - Open the PRESET MANAGER by clicking SELECT PRESET with the right mouse button.

AVT Audio Video Technologies

Create/load and manage Presets (2)



Audio Video Technologies

Save/restore a system configuration (1)

- The complete system settings can be saved on your PC via MENU → FILE → EXPORT
- The system configuration file may contain:
  - The current configuration
  - Presets
  - Super presets
  - Recorded Hold signals
  - Intro / data privacy query signals
  - Audio Codec configuration
- To restore the configuration, go to MENU → FILE → IMPORT.
  - On the import dialog, you may define which parts of the backup should be restored.
  - DISABLE DATABASE: The database settings are restored but access to the database is disabled in the configuration.
    - This makes sense if the configured database settings do not fit for a new system because of e.g. a different SQL Server.
  - IMPORT ACCONNECT RELATED IP ADDRESSES FROM THE FILE: Enable to restore the IP addresses for connecting to an audio codec.
  - IMPORT THE IP ADDRESSES OF THE THIPPRO FROM THE FILE: Only available when restoring changes the IP Addresses of the THipPro. Enable if you like to restore the IP Address from the backup.
    - After the backup was restored the PC software might lose connection to the THipPro. Enter the new IP address of the THipPro in the PC software under MENU → CONTROL INTERFACE.
- On the SCREENER SOFTWARE, click on MENU → SYSTEM CONFIGURATION with the right mouse button to import or export the system configuration.

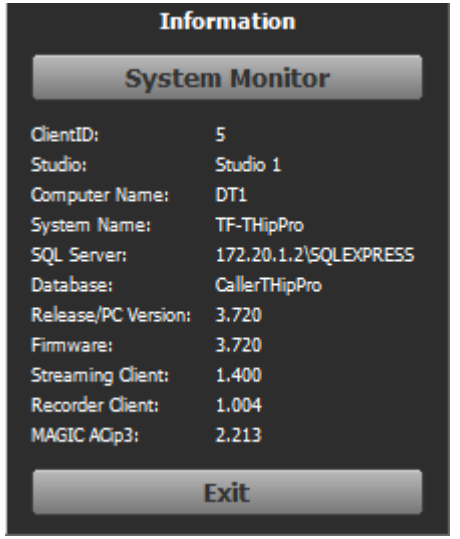
AVT Audio Video Technologies

Save/restore a system configuration (2)

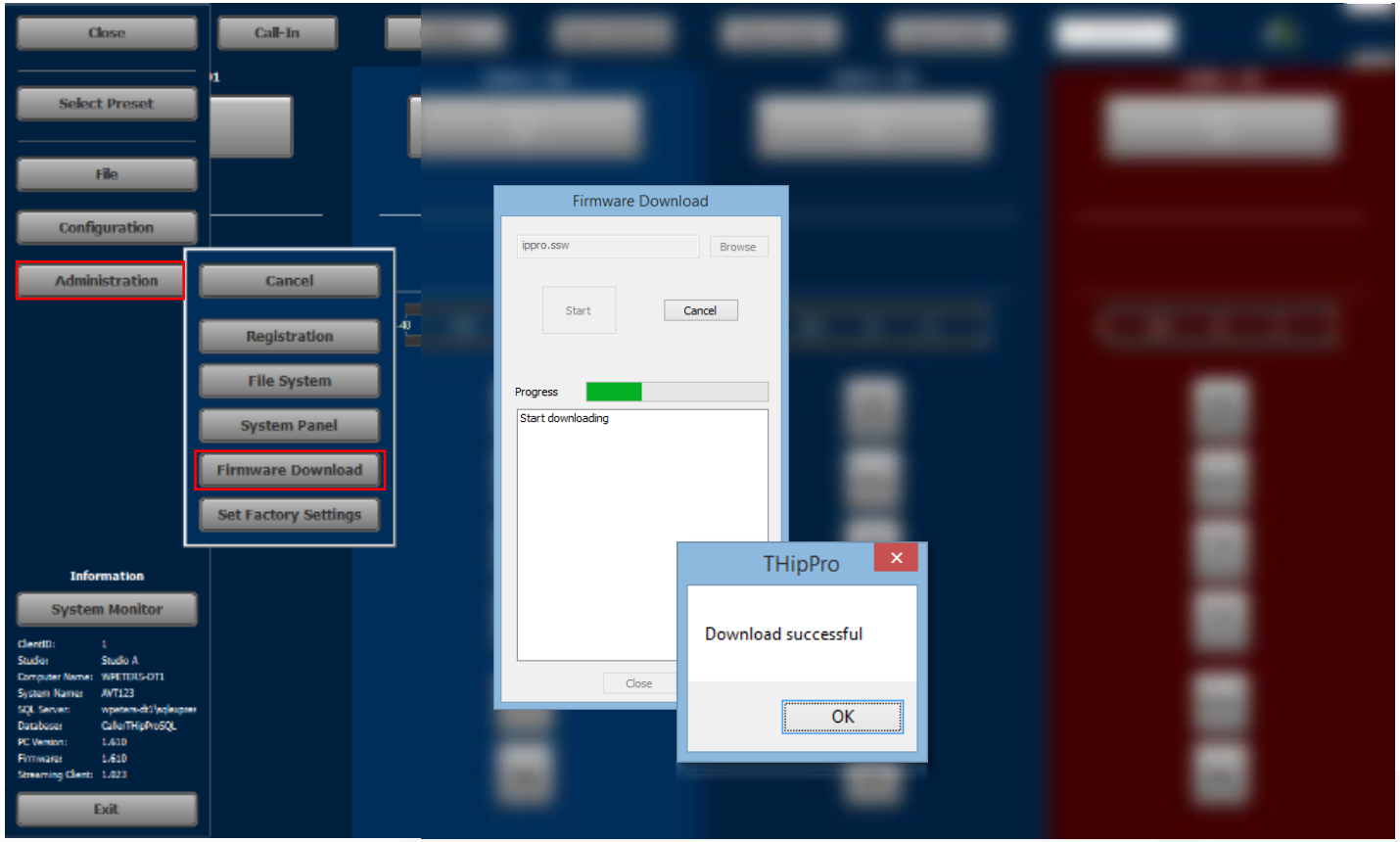
- All local settings of LAN Clients and Screener Clients are saved in separate files on each client PC.
- Find the files in the following folders depending on the SETTINGS FOLDER configuration:
  - For all users:
    - %PROGRAMDATA%\AVT\MAGIC THipPro LAN
    - %PROGRAMDATA%\AVT\MAGIC THipPro SCREENER
  - For the current user (roaming)
    - %APPDATA%\ROAMING\AVT\MAGIC THipPro LAN
    - %APPDATA%\ROAMING\AVT\MAGIC THipPro SCREENER
  - For the current user (nonroaming):
    - %APPDATA%\LOCAL\AVT\MAGIC THipPro LAN
  - Via freely configurable network path
  - Temporary files (logfiles, recordings) are saved under:
    - %USERPROFILE%\AVT\MAGIC THipPro LAN
    - %USERPROFILE%\AVT\MAGIC THipPro SCREENER

Backing up the Local Configuration

- In the lower area of the menu important information is displayed
  - Current Client ID of the workplace
  - Studio connected with the Client
  - Your own computer name
  - The system name
  - The SQL Server in use
  - The database in use
  - The PC Software Version
  - The Firmware Version
  - The Streaming Client Version



System information



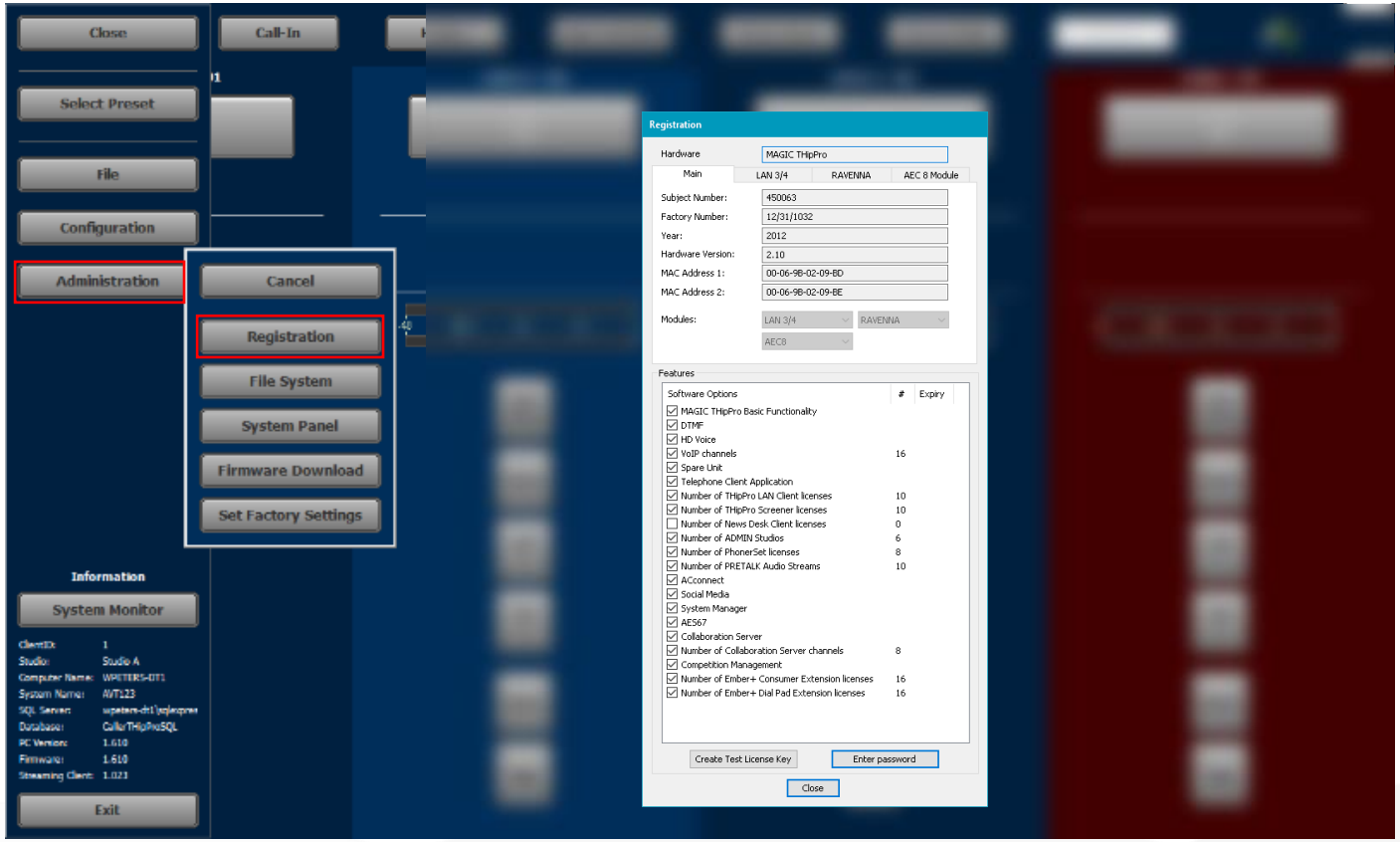
Firmware Download (1)

- Find updates to the MAGIC THipPro software on our website avt-nbg.de in the DOWNLOAD section under SOFTWARE.
- A new release includes new versions of LAN Client and Screener as well as a new firmware version.
- The firmware file is included in the PC software downloads.
- Update the system by installing the PC software on one client.
- After starting the new version you will be prompted to update the firmware.
  - Confirm and update the firmware.
  - When the update is finished, the unit will restart.

- You may also update the firmware manually via MENU → ADMINISTRATION → FIRMWARE DOWNLOAD.
  - The firmware file included in the PC software is automatically loaded.
  - Click on BROWSE if you are advised to load a different firmware by AVT support.
- When the THipPro has restarted, install the new PC software on all clients connected to the system.

- In the SCREENER SOFTWARE, find the FIRMWARE DOWNLOAD directly under MENU.

Firmware Download (2)

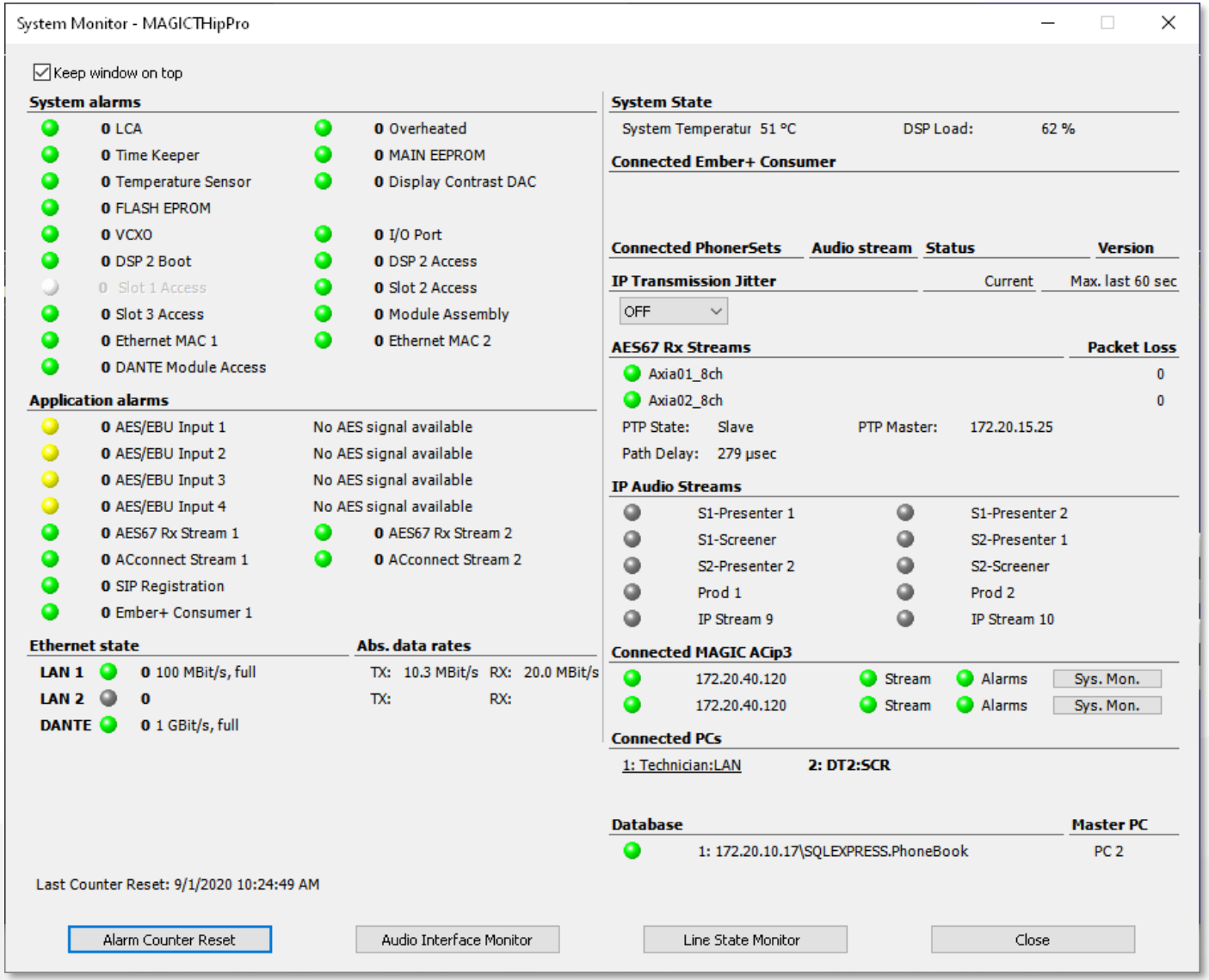


Registration (1)

- Open ADMINISTRATION → REGISTRATION to check which SOFTWARE options are available in your system.
- ENTER PASSWORD: Adding new licences is done by entering a licence password.
- Contact us if you like to purchase a licence.
  - Attach the FACTORY NUMBER of your unit which is displayed in the REGISTRATION window.
- CREATE TEST LICENCE KEY: If you like to test a feature before buying it, create a test licence key and send it to us along with the factory number of the unit.
  - The test licence will work for a limit time.
  - The timer only counts when the unit is running.
  - The test licence enables all available features.

- In the SCREENER SOFTWARE, find the REGISTRATION directly under MENU.

Registration (2)



System Monitor (1)

- Open MENU – SYSTEM MONITOR to get an overview of the system status.
- KEEP WINDOW ON TOP: Activate to keep the windows always on top of the screen.
- The status is displayed as text as well as LEDs:
  - 🔴 : Alarm is active. There is an error.
  - 🟠 : Alarm is active but not relevant for the current configuration.
  - 🟢 : Status is OK.
- Find alarm counters next to the LEDs which indicate how often the alarm occurred since the Alarm Counter was reset.
- The information is organised in sections:
  - SYSTEM ALARMS: These alarms show the status of the MAGIC THipPro hardware.
- APPLICATION ALARMS: These alarms show the status of the basic functionality of the MAGIC THipPro:
  - AES/EBU Input: The system can detect if there is a valid digital audio signal at the AES inputs. Find more information on the alarm in the right column.
  - AES67 RX STREAM: The built-in AES67 software module cannot receive all configured streams. The status of the DANTE module is not included here.
  - ACCONNECT STREAM: An audio stream from an optional ACip3 audio codec to the MAGIC THipPro is missing.
  - SIP REGISTRATION: At least one of the VoIP lines couldn't register with the SIP server.
  - DHD AUDIO MATRIX: The MAGIC THipPro couldn't connect to a configured DHD core.
  - EMBER+ CONSUMER: The MAGIC THipPro couldn't connect to a configures Ember+ Provider.

System Monitor (2)

- ETHERNET STATE: Displays information on each LAN interface of the MAGIC THipPro:
  - LED: Displays whether the physical connection to the network could be established.
  - SPEED: Displays speed and duplex mode of the network connection. (100MBit/s, full is required)
  - TX/RX: Gross data rates of the interface in send and receive direction. The MAGIC THipPro can handle up to 25 MBit/s in RX direction. If the data rate is higher, check for broadcast or multicast traffic that is reaching the THipPro unintentionally.
  - DANTE: Displays link state, speed and duplex mode of the optional DANTE module.
- SYSTEM STATE: Displays the general system health:
  - SYSTEM TEMPERATURE: Displays the temperature on the main board in °C. It is recommended to keep the temperature below 50°C through suitable cooling. The MAGIC THipPro will raise the TEMPERATURE ALARM when 57 °C are reached. A higher temperature can lead to an undefined operation of the device.
- CONNECTED EMBER+ CONSUMER: Shows which Ember+ Consumers are connected to the MAGIC THipPro's Ember+ Provider module.
- DHD CORE CONNECTIONS: Show the status of the connections to the configured DHD cores.
- CONNECTED PHONERSETS: Shows the status of connected PhonerSet phones:
  - IP ADDRESS of the PhonerSet.
  - AUDIO STREAM: Status of the audio stream for pretalk.
  - WORKPLACE: The workplace configured in the PhonerSet app.
  - VERSION: Version number of the PhonerSet app installed on the telephone.
- IP TRANSMISSION JITTER: Displays the jitter statistics of a selected VoIP audio stream.
  - LINE: Select a telephone line to monitor it.
  - CURRENT: Displays the current jitter value.
  - MAX LAST 60 SECONDS: Shows the highest jitter value which occurred during the last 60 seconds.

System Monitor (3)

- AES67 RX STREAMS: Displays the status of the built-in AES67 software module. The DANTE streams are not included here.
  - STREAM NAME
  - PACKET LOSS: Number of audio packets lost in the received streams.
  - PTP STATE: Precision Time Protocol. The MAGIC THipPro can only work as SLAVE.
  - PTP MASTER: IP address of the PTP master in the audio network.
  - PATH DELAY: Current delay to the PTP master.
- IP AUDIO STREAMS: Displays the status of the optional Pretalk Streams.
  - LED: Displays whether the MAGIC THipPro receives a pretalk stream from a PC software client.
  - NAME: Name of the PC software client to which the stream is currently assigned.

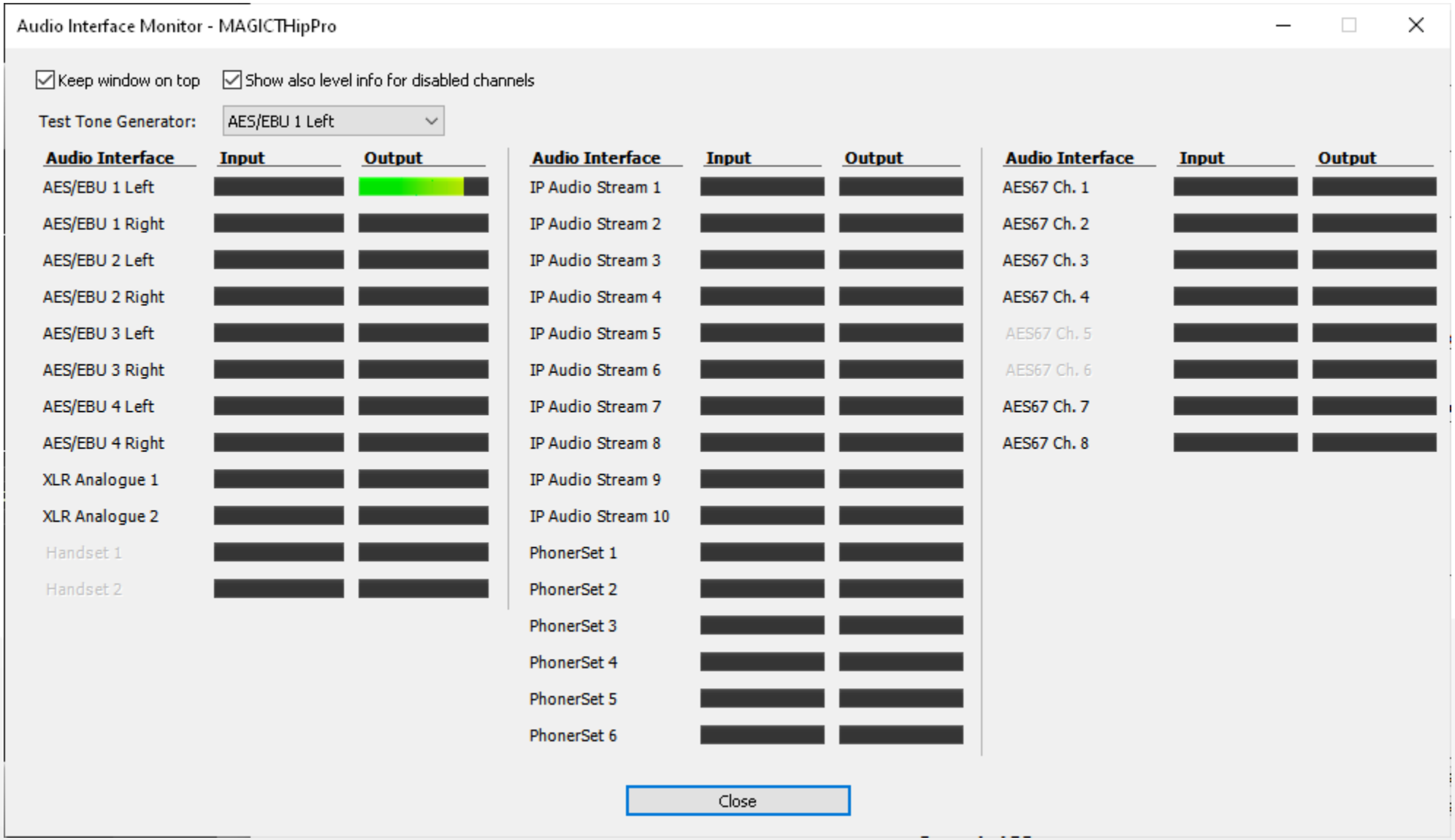
- CONNECTED MAGIC ACIP3: Displays the status of connected ACip3 audio codecs using ACconnect.
  - LED: Displays whether the PC software can access the MAGIC ACip3.
  - IP ADDRESS: IP address of the ACip3 used to control it.
  - STREAM: Displays whether the audio stream of the MAGIC ACip3 is reaching the MAGIC THipPro.
  - ALARMS: Displays whether there are any alarms active on the MAGIC ACip3.
  - SYS.MON.: Click to open the System Monitor of the MAGIC ACip3.

System Monitor (4)

- CONNECTED PCS: Displays the PC clients connected to the MAGIC THipPro.
  - NUMBER: Internal port used to connect the PC client.
  - NAME: Client alias.
  - TYPE / PORT
    - LAN: LAN Client
    - SCR: Screener Client.
    - NDC: News Desk Client
    - HYM: MAGIC System Manager.
    - MTC: Temporary access. The PC is not included in one of the CLIENTS / SECURITY lists. The telephone line control is disabled.
    - PORT NUMBER: Type not defined. The PC is not included in one of the CLIENTS / SECURITY lists. The telephone line control is disabled.
    - INT: MAGIC THipPro Intercom Client. (Not allowed)
    - VMS: MAGIC Voice Mail System Client. (Not allowed)
  - BOLD: The master PC is printed in bold. It manages access to the SQL phone book database.

- DATABASE: State of the SQL phone book database connection.
  - LED: Shows whether the database is available.
  - NUMBER: Internal port. One for each database.
  - PATH: SQL database path.
  - MASTER PC: Shows which PC is the master PC. The master PC synchronizes access to the database.

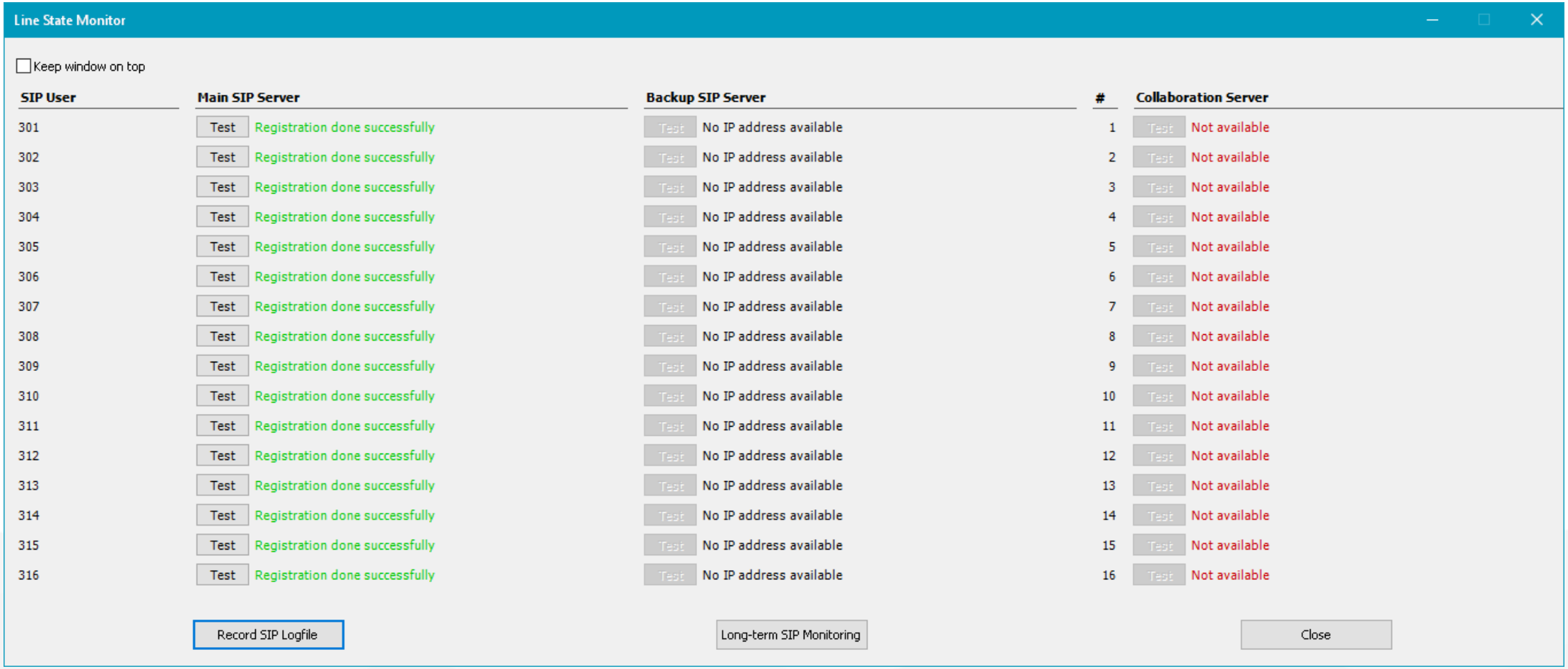
System Monitor (5)



Audio Interface Monitor (1)

- Open MENU – SYSTEM MONITOR – AUDIO INTERFACE MONITOR to get an overview of the audio interfaces.
- KEEP WINDOW ON TOP: Activate to keep the windows always on top of the screen.
- TEST TONE GENERATOR: Select an audio interface from the drop-down box to generate a sine test signal on the respective audio output.
- Each audio channel of the device is displayed:
  - AUDIO INTERFACE: Name of the audio channel.
    - AES/EBU: Digital audio interfaces at the back of the device.
    - XLR ANALOGUE: Analogue audio interfaces at the back of the device.
    - HANDSET: Handset audio interfaces at the front of the device.
    - IP AUDIO STREAM: Pretalk streams over IP.
    - PHONERSET: PhonerSet audio streams over IP.
    - AES67: AES67 audio channels of the AES67 software module.
    - DANTE: Audio channels of the Dante hardware module.
    - RAVENNA: Audio channels of the Ravenna hardware module.
  - INPUT: Audio level of the signal fed to the device.
  - OUTPUT: Audio level of the signal Audio level of the signal emitted by the device.

Audio Interface Monitor (2)

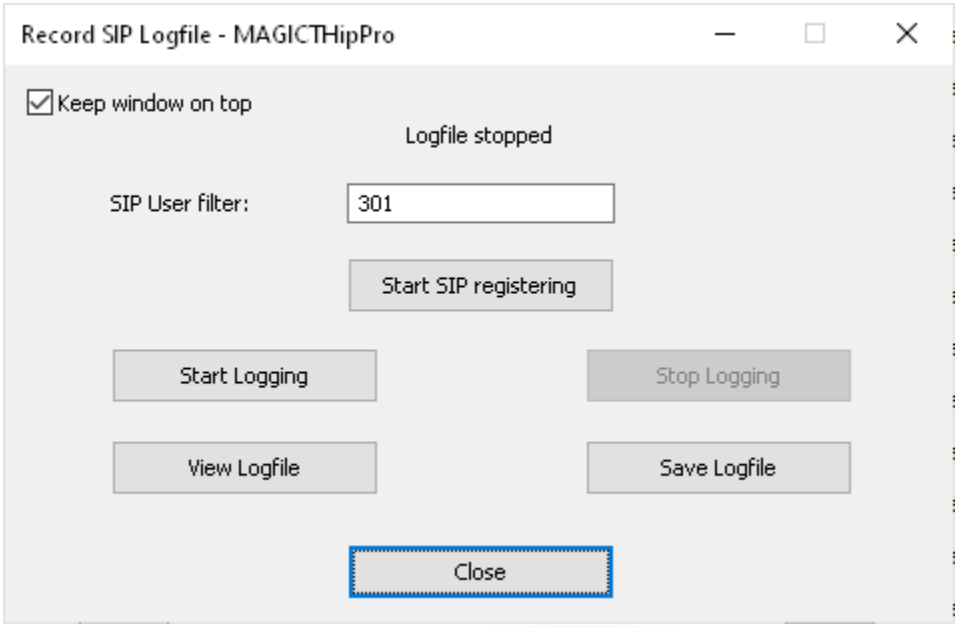


Audio Video Technologies

Line State Monitor (1)

- Open MENU – SYSTEM MONITOR – LINE STATE MONITOR to get an overview of the VoIP telephone lines and the Collaboration Server lines.
- KEEP WINDOW ON TOP: Activate to keep the windows always on top of the screen.
- Each telephone line is displayed in a line of the screen:
  - SIP USER: SIP user name as configured.
  - MAIN SIP SERVER: State of registration at the main SIP server.
    - TEST: Click to start registration. The result is displayed next to the button. The test may take up to 2 minutes.
    - STATE: State of the registration process in plain text.
  - BACKUP SIP SERVER: State of registration at the backup SIP server.
    - TEST: Click to start registration. The result is displayed next to the button. The test may take up to 2 minutes.
    - STATE: State of the registration process in plain text.
- COLLABORATION SERVER: State of the registration of the line at the collaboration server for Microsoft Teams.
  - #: Line number
  - TEST: Click to start registration. The result is displayed next to the button. The test may take up to 2 minutes.
  - STATE: State of the registration process in plain text.

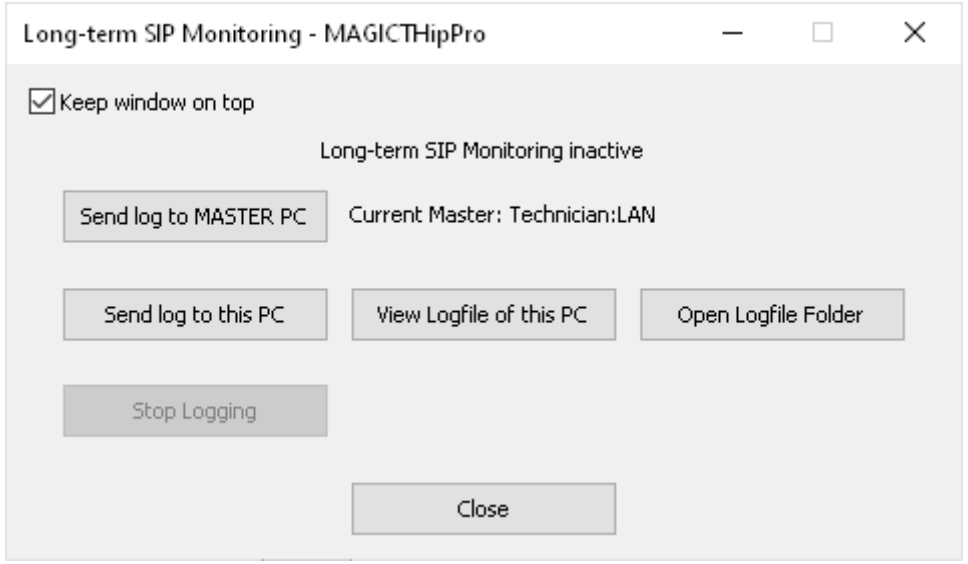
Line State Monitor (2)



Record SIP Logfile (1)

- Open MENU – SYSTEM MONITOR – SIP STATE MONITOR – RECORD SIP LOGFILE to save the SIP communication of the MAGIC THipPro to a file.
- KEEP WINDOW ON TOP: Activate to keep the windows always on top of the screen.
- The logfile is stored in the internal flash memory of the device. Since the memory space is limited, the logging should not be active for more than one hour.
- SIP USER FILTER: Enter any string (e.g. the SIP user name) to filter the messages written to the logfile.
- START LOGGING: Click to start recording the SIP messages.
- START SIP REGISTERING: This is used if you like to record the SIP registration process. Click while the logging is active.
- STOP LOGGING: Click to stop recording the SIP messages.
- VIEW LOGFILE: Open the logfile in a text editor on the PC. Available once the logging is stopped.
- SAVE LOGFILE: Click to save the logfile on the PC. Available once the logging is stopped.

Record SIP Logfile (2)



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Long-term SIP Monitoring (1)

- Open MENU – SYSTEM MONITOR – SIP STATE MONITOR – LONG-TERM SIP MONITORING to save the SIP communication of the MAGIC THipPro to a file over a long time period.
- KEEP WINDOW ON TOP: Activate to keep the windows always on top of the screen.
- The logfile is stored on the PC. The recording time is limited by the resources of the PC.
- SEND LOG TO MASTER PC: Starts logging. The master PC writes the logfile to its logfile folder as it is configured in its local settings. The current master PC is displayed next to the button.
  - Note: The master PC role is assigned to a different client if the client on the current master PC loses connection to the MAGIC THipPro.
- SEND LOG TO THIS PC: Starts logging. The logfile is stored on the PC where the logging was started.
  - Note: Do not close the Long-term SIP Monitoring windows as this will stop the logging.
- VIEW LOGFILE OF THIS PC: Click to open the Long-term SIP logfile stored on this PC in a text editor.
- OPEN LOGFILE FOLDER: Click to open the logfile folder of this client in the windows explorer.
- STOP LOGGING: Click to stop logging.

Long-term SIP Monitoring (2)

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