



Configuration manual

FRITZ!Box Type: Trunk





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This configuration manual is limited to the settings required to connect to the gnTel platform. For general manuals with detailed features we would like to refer to the manufacturers manual.

The screen shots used in this manual have been obtained using the FRITZ!Box Trunk.



1 Introduction

This manual describes the settings required to properly connect and work with the gnTel platform. The manual is applicable to the following type of devices: FRITZ!Box Trunk.

2 Key terms and abbreviations

The following key terms and abbreviations are used:

PI	Provisioning Interface from gnTel, https://provisioning.gntel.nl
Customer code	Customer code of the customer at gnTel, as stated in the PI.
Trunk account	Account code from the SIP Account from the device, as stated in the PI. This code consists of the Customer code + 3 unique digits for each account.

3 Trunk account

To obtain the details to enable a trunk account, navigate to the PI. Within the PI, under 'Technical' → 'Trunk accounts', all the trunk accounts belonging to the customer can be found. Click on the account code to view the details belonging to this trunk. A screen similar to the screen shot below will appear.

Trunk account detail		> Edit	
Account code	6801001001		
Context		Customer	-E- rA k E-
Creation date	1 August 2017 17:06	Password	h. rA k
112 region	06	Number of lines	8
Call permissions	Ausland Standard Tarife Deutschland Festnetz Deutschland Mobil	Fallback number	None
Allowed IP range	0.0.0.0/0		
Phone numbers forwarded to this trunk		> Change inbound numbers	
Numbers	0211 10		
	0211 11		
	0211 12		
	0211 13		
	0211 14		
	0211 15		
	0211 16		
	0211 17		
	0211 18		
	0211 19		

Advanced configuration

Back in the overview of the trunk accounts you can find a link to the 'Advanced configuration' settings. Besides the restricted IP which depends on the customer, the recommended settings can be found in the screen shot below.

Change advanced account configuration

Codecs: G.711 A-law (europe), G.711 u-law (united states), G.729a (patented), H.263 (video), H.264 (video). Hold down "Control", or "Command" on a Mac, to select more than one.

T.38: Disabled The type of T.38 supported on the account.

Security

Password: Generate password
Assign a password to this account.

Restrict IPs: Allow only certain IP addresses or blocks to connect. Example: 1.2.3.0/24-4.5.6.7

Allow all IPs: Allow all IP addresses to connect.

Encrypted audio: If checked, calls will use secure RTP. Only works on the new platform. DO NOT ENABLE IF YOUR PHONE DOES NOT SUPPORT THIS.

Allow unauthenticated: no Choose how to handle unauthenticated calls.

Static IP config

Transport: UDP Default transport protocol.

Static ip: Set to an IP address if this is a static (non-registering) device on a fixed IP.

Port: The peer port. Leave blank for dynamic (registering) hosts.

New SIP server: Default connections through new SIP proxy.

Expert

Use custom context: If checked, the calls will arrive in pi_custom_account_S(accountcode) or pi_custom_customer_S(customercode) instead (depending on the custom_context_scope customer setting).

Caller ID header: P-Asserted-Identity Which header to use for Caller ID. The "From" choice will not allow Caller ID updates during a call.

NAT: If enabled (default) we assume full NAT (force-rport, contact.rewriting, comedia RTP).

Finally, selecting the numbers that the Trunk account should forward can also be done in the PI. When editing the trunk account, numbers owned by the customer can be selected, as shown in the example below.

Edit trunk account *61 DI 35..55*

Numbers: Select the inbound numbers this trunk account should forward.

Mangle number: Full number (e.g. 31501234567 or 49) Optional mangling of the number sent to the Trunk. The default is to send the full number without leading zeroes or pluses.

Save and close



When using a Trunk account, it is highly recommended to restrict the IPs linked to the account. This makes it harder for other people to abuse the account and cause unexpected costs.

4 Loading the factory settings

4.1 Via web interface

Go to the web interface and click on 'System'. Navigate to 'Backup' → 'Factory settings'. Click on the 'Load Factory Settings' button to reset the FRITZ!Box to its default settings.

4.2 Using a telephone

If the FRITZ!Box device is exhibiting errors, e.g. not responding to the web interface, one can load the factory settings on the FRITZ!Box device using a connected telephone.

First configure a telephone to use the keypad function.

- Some phones might already be able to use keypad sequences such as *121#, in that case continue to loading the factory settings.
- If a phone is connected to the 'FON SO' port or a cordless phone that is **not** registered, the keypad functions must be enabled:
 - With many phones, go to the menu → Operation at a PBX → Dialing options → Dial * and # to configure this.

Loading the factory settings:

- Call the following sequence: # 9 9 1 * 1 5 9 0 1 5 9 0 *
- Hang up the phone after around 3 seconds.

5 Logging on to the web interface

A FRITZ!Box device is approachable via the web interface if the PC and the FRITZ!Box device are located in the same sub net.

Logging on to the web interface:

- Go to a web browser and type the following address in the address bar: <http://fritz.box>

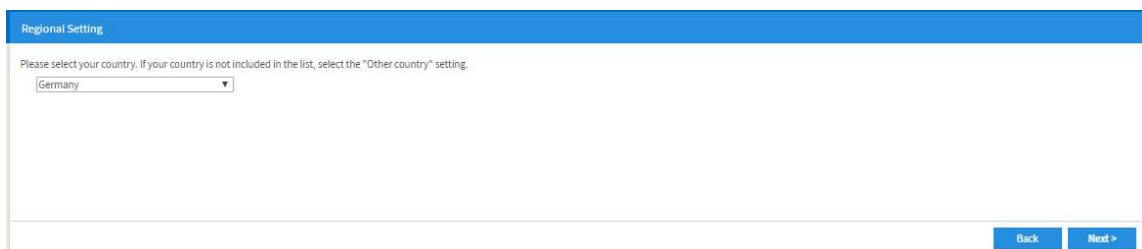
6 Web interface settings

The web interface allows the user to check and adjust the devices' settings.

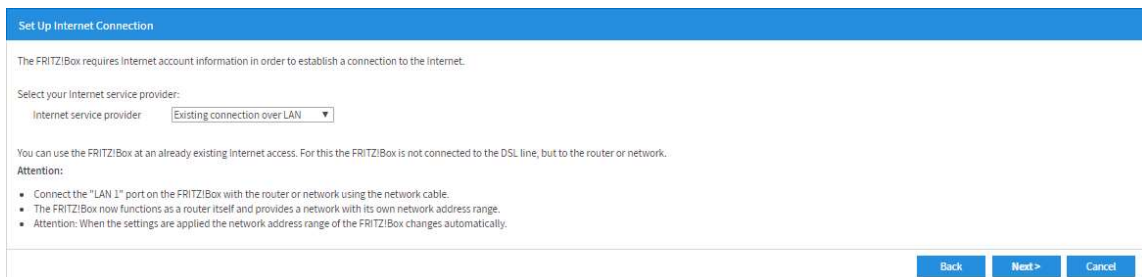
6.1 First time use

When starting the device for the first time, an internet connection has to be configured.

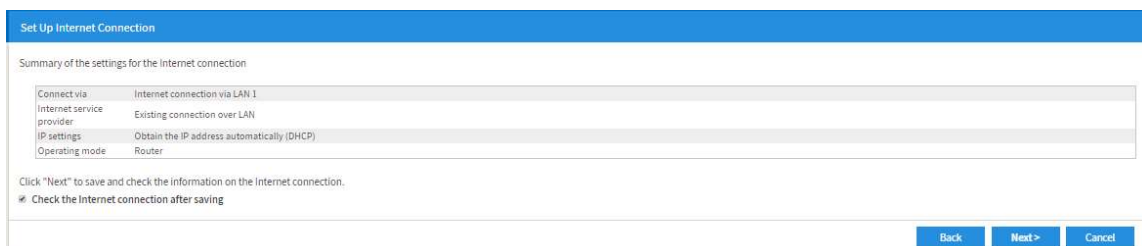
1. Select the region.



2. Set the 'Internet service provider' to 'Existing connection over LAN'.



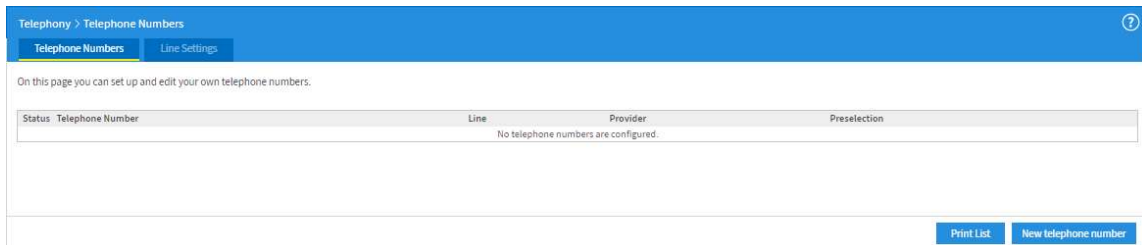
3. Check the summary and save the settings.



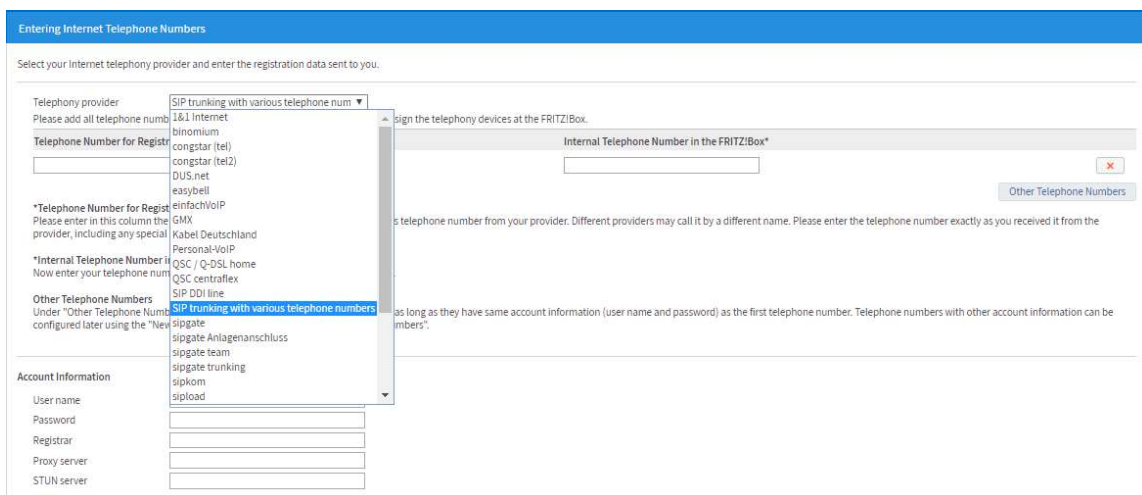
6.2 Setting up a trunk account

Work through the following steps to configure the trunk account:

1. Click 'Telephony' and navigate to the 'Telephone Numbers' menu.



2. Click the 'New telephone number' button.
3. Enable the option "Internet telephone number" and click "Next".
4. Select "SIP trunking with various telephone numbers" from the drop-down list.



5. In the same menu, enter the following details:
 - Telephone Number for Registration: Phone number linked to the trunk account in the PI.
 - Internal Telephone Number for the Fritz!Box: Phone number from the PI.
 - User name: PI User name.
 - Password: PI Password.
 - Registrar: voip.gntel.nl
 - STUN server: stun.gntel.nl
6. The other settings should be set as in the example below.

Entering Internet Telephone Numbers

Select your Internet telephony provider and enter the registration data sent to you.

Telephone provider:

 Please add all telephone numbers of the SIP trunking provider you would like to assign the telephony devices at the FRITZ!Box.

Telephone Number for Registration*	Internal Telephone Number in the FRITZ!Box*
<input type="text" value="02_3687_38510"/>	<input type="text" value="02_3687_38510"/>

[Other Telephone Numbers](#)

***Telephone Number for Registration**
Please enter in this column the telephone number for registration. You received this telephone number from your provider. Different providers may call it by a different name. Please enter the telephone number exactly as you received it from the provider, including any special characters it may include.

***Internal Telephone Number in the FRITZ!Box**
Now enter your telephone number without a prefix and without special characters.

Other Telephone Numbers
Under "Other Telephone Numbers" you can create additional telephone numbers, as long as they have same account information (user name and password) as the first telephone number. Telephone numbers with other account information can be configured later using the "New Telephone Numbers" button under "Telephone Numbers".

Account Information

User name:
 Password:
 Registrar:
 Proxy server:
 STUN server:

Telephone Number Format

Precede the number dialed with these prefix numerals:

Country code: None Without prefix (49) With prefix (0049)
 Area code: None Without prefix With prefix (0)

Relay outgoing emergency calls without prefixes
 Relay special rate numbers without prefixes
 VoIP provider with North American Number Plan (NANP)
 (International prefix 011 instead of 00)
 Relay local telephone number in international telephone number format
 Suffix for Internet telephone numbers:

Features

DTMF transmission:
 Suppress outgoing Caller ID (CLIR):
 Caller ID:
 Use Internet telephone number for registration
 Provider supports call-back on busy (CCBS) in accordance with RFC 4235
 Enter your area code:
 Area code:

7. Click next and check if the registration has been successful.

Checking Internet Telephone Numbers

You entered the following registration information for the new Internet telephone number:

Provider	.de Trunking
Internet Telephone Number	0211 510
User name	68 0
Registrar	.de
Proxy server	
STUN Server	.de

The registration data have been saved.

The Internet telephony check was successful.

More numbers can be added using the 'Edit' (pencil) button in the 'Telephone Numbers' tab.

Telephony > Telephone Numbers

Telephone Numbers | Line Settings

On this page you can set up and edit your own telephone numbers.

Status	Telephone Number	Line	Provider	Preselection	
	02113687508510	Internet		*121*	

[Print List](#) [New telephone number](#)

The rest of the phone numbers which are linked to the trunk account can be added here, as shown below. If a password is requested, the PI password should be used.

Edit Telephone Number

Enter here the login data you received from your Internet telephony provider.

Use Internet telephone number

Telephony provider:

Please add all telephone numbers of the SIP trunking provider you would like to assign the telephony devices at the FRITZ!Box.

Telephone Number for Registration*	Internal Telephone Number in the FRITZ!Box*	
<input type="text" value="02...3687...8510"/>	<input type="text" value="02...3687...8510"/>	
<input type="text" value="02...3687...8511"/>	<input type="text" value="02...3687...8511"/>	
<input type="text" value="02...3687...8512"/>	<input type="text" value="02...3687...8512"/>	
<input type="text" value="02...3687...8513"/>	<input type="text" value="02...3687...8513"/>	
<input type="text" value="02...3687...8514"/>	<input type="text" value="02...3687...8514"/>	
<input type="text" value="02...3687...8515"/>	<input type="text" value="02...3687...8515"/>	

[Other Telephone Numbers](#)