Interop T440/T640 2.0.0 Deutsche Telefon Trunk

Deutsche Telefon Standard AG Trunk (T440/640 SW-version 2.0.0)

Feature	
Outgoing Calls	Yes
Incoming Calls	Yes
CLIP incoming	Yes
CLIP outgoing	Yes
Call Forwarding	Yes*
Call Transfer	Yes
Call Waiting	Yes
DTMF	Yes
Anonymous Call	Yes
A-number forwarding	Yes
Fax	see chart below

*= Edit the SIP Transports, according to your external IP-address.

Gigaset T440/T640 PRO settings.

For entering a new SIP trunk into the PBX, you need some steps:

1. Adding a new Gateway group
2. Adding a new SIP gateway
3. Defining the inbound routes (assignment of number to extension)
4. Defining the outbound routes

Let's assume our SIP trunk contains the following block of numbers:

0891234567[0-9]

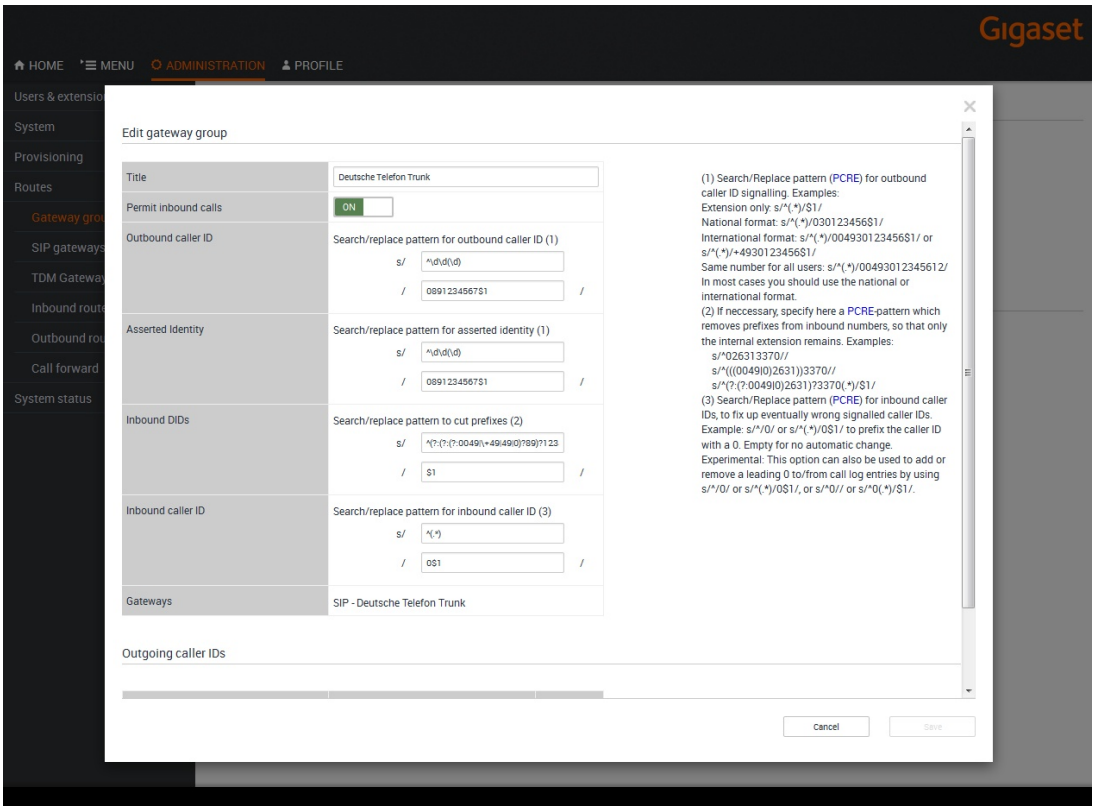
And we choose follwowing internal numberblock with 3-digit numbers:

67[0-9]

Gateway Group

In the Gigaset PBX go to *"Administration"* - *"Routes"* - *"Gateway groups"* enter a name for the new group and click on: **Create new group**

In the Gateway group you have to define the Outbound Caller ID, the Inbound DIDs (how the number is forwarded to the Inbound routes) and the Inbound caller ID (number presentation of external caller). in addition you can permit here inbound calls in general for this gateway group.



Example of Deutsche Telefon Standard Trunk gateway group settings.

Outbound caller ID

As just the last digit of the trunk number block is changing, you can select just the last digit (in brackets) and put it into the variable $1. As the provider wants the signalling number in the format +(country-code)(city-code)(number), you have to enter this number into the next line (here: **+49891234567$1**, where the **$1** represents the changing part).

The provider will take care about the number representation to the called party. He will present e.g. **08912345678** to the calling party.

Modifications

In case you are using not 3-digit extensions like 123, but 2- or 4-digits, you have to change the Search/replace pattern.

In our example we are using 3-digits, where only the last digit (inside the brackets) is taken into account.

For 2-digits it can look like this:

^(\d\d)

+4989123456$1

Now we're using the complete range from 10 to 99 as extensions, because **\d\d** is inside the bracket. Therefore we also have to remove the '**7**' from the 2nd line.

When extension **34** is dialing out, the resulting number would be *+4989123456***34**

Asserted Identity

These fields are used specially for external forwardings. Some providers need special settings in order to present the correct number at the receiving party. For Deutsche Telefon Standard Trunk, you can the entries from the outbound caller ID fields e.g. **^\d\d(\d)** and **+49 891234567$1**

Inbound DIDs

For incoming calls, you can use the regular expression, generated by the setup assistant. In your case you would have to adjust the city-code and the pilot-number, according to your line-settings.

^(?:(?:(?:0049|\+49|49|0)?89)?12345)?(.*)

This expression cuts all possibly available country- and city-codes and the pilot-number from the incoming number and only the extension is remaining (here: **678**). This will be forwarded to the Inbound Routes.

Inbound caller ID

For incoming calls, we will add an additional **0** in front of the external number of the caller, in order to use the callback-feature of the phone (e.g. **0089987654321**). During the call-setup the additional **0** will be automatically removed.

Gateways

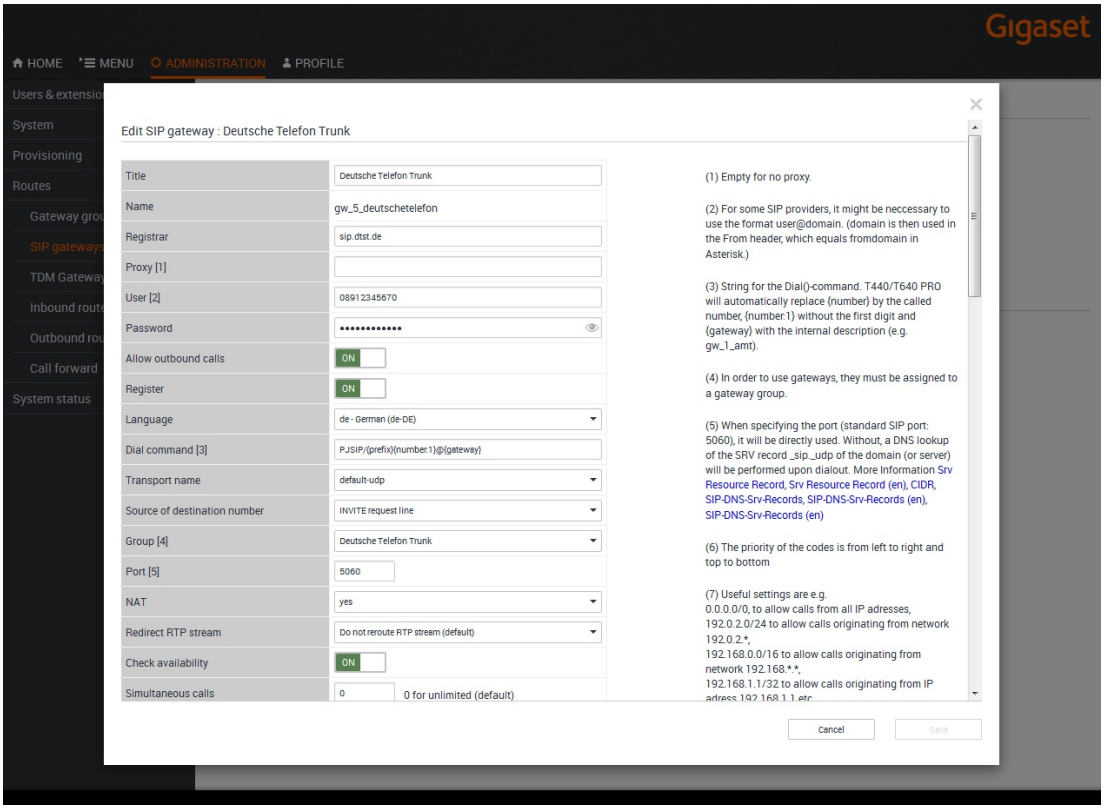
This field will be empty when you create this Gateway group. It will show later the assigned SIP gateways.

SIP gateway

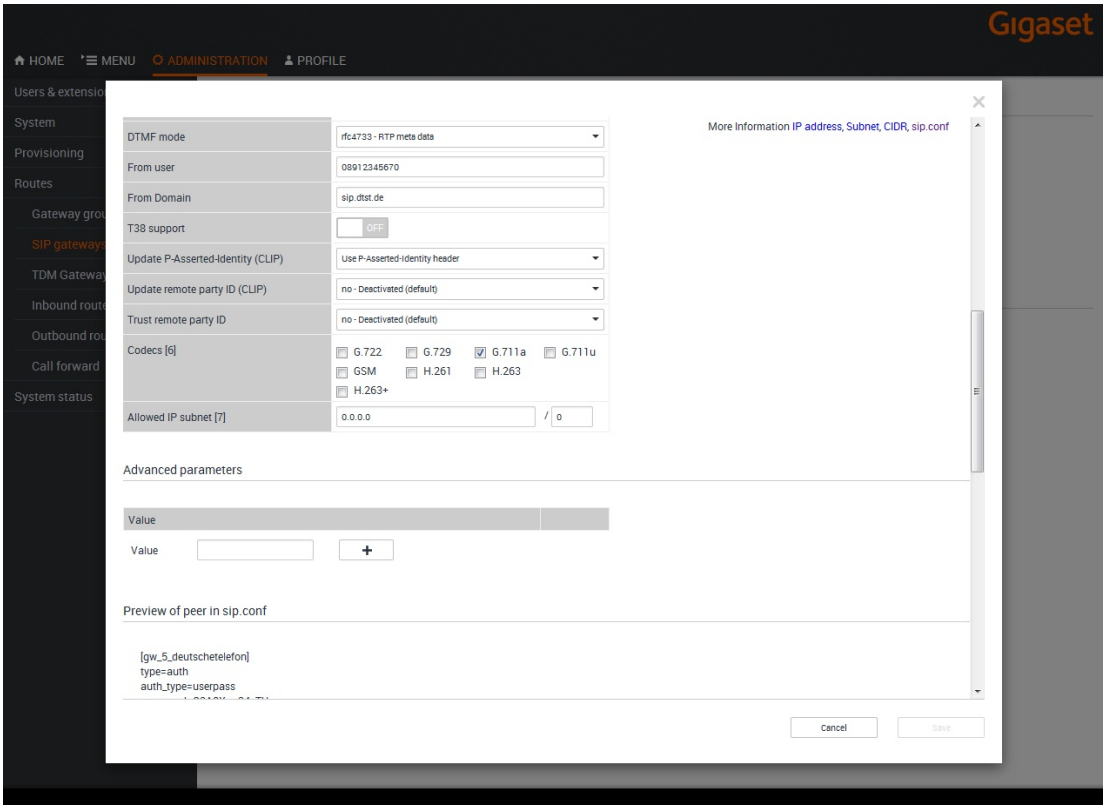
In the Gigaset PBX go to *"Administration" - "Routes" - "SIP gateways"* enter a name for the new gateway and click on: **Create new gateway**

The SIP gateway contains all necessary data for the registration and dial command and how the number is delivered to/from the provider.

Just enter or choose the values according to your data you received from the provider.



Example of Deutsche Telefon Standard Trunk gateway settings 1/2.



Example of Deutsche Telefon Standard Trunk gateway settings 2/2.
Registrar

You can use here the DNS-name of the server.

Dial command

The dial command is the command which is used in the asterisk software. The term **{number :1}** means, that at the dialled number (e.g. **0089987654321**) the first digit is removed. If you don't use a line access code (in most cases '0' is used), you have to remove the '**:1**' ! ! ! In case you want to use the prefix-fields from the outbound rules, please add '**{prefix}** before '**{ number:1}** .

Group

Select here the previously created gateway group.

Update P-Asserted-Identity (CLIP)

To display the correct extension at external parties, you have to use the P-Asserted-Identity (PAI) setting. If this is not selected, only the head-number (e.g. **0891234567-0**) will be presented, no matter which extension is used for dialing.

T.38 support

In order to have the best fax support on the FXS ports, you have to deactivate the T.38 support option. A fallback to G.711 will be used instead.

Advanced Parameter

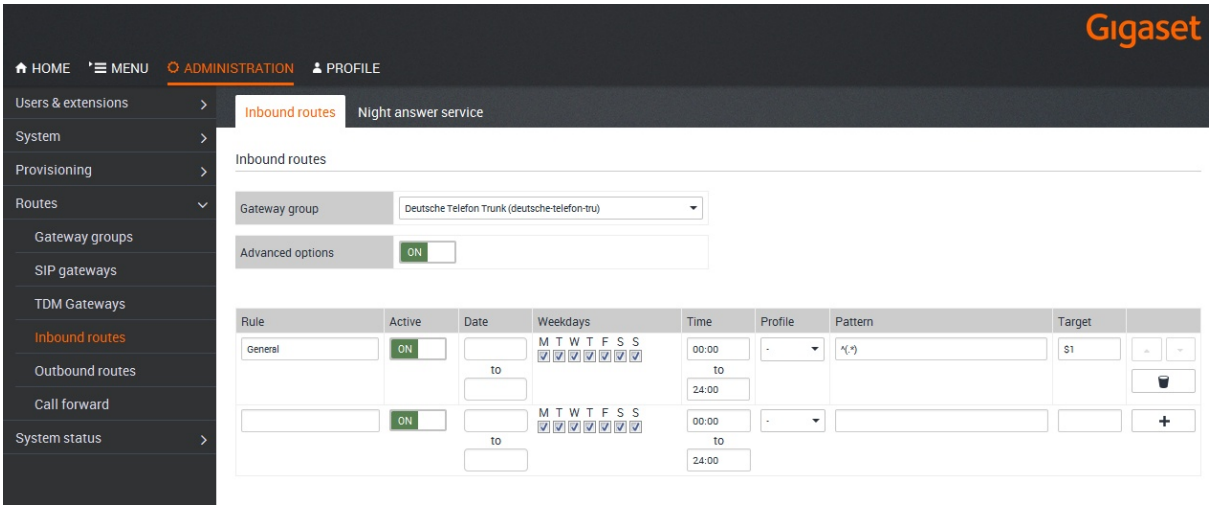
No advanced parameters necessary.

Underneath you will see then a preview of the sip.conf file.

Inbound routes

In the Gigaset PBX go to *"Administration" - "Routes" - "Inbound routes"* select the correct Gateway group and press **Show.**

In addition it is advised to activate the **advanced options** by clicking it to **'ON'** and then pressing **Show.**



Example of Deutsche Telefon Standard Trunk Inbound routes.
Rule

Enter here a name for the according rule.

Date / Weekdays / Time

With these settings you can configure a time-controlled routing to different targets.

Pattern / Target

In the pattern you define which part of the incoming number is used to forward the call to the according extension.

In our example we receive already the correct extension from the gateway group. Therefore no further number-manipulation is necessary.

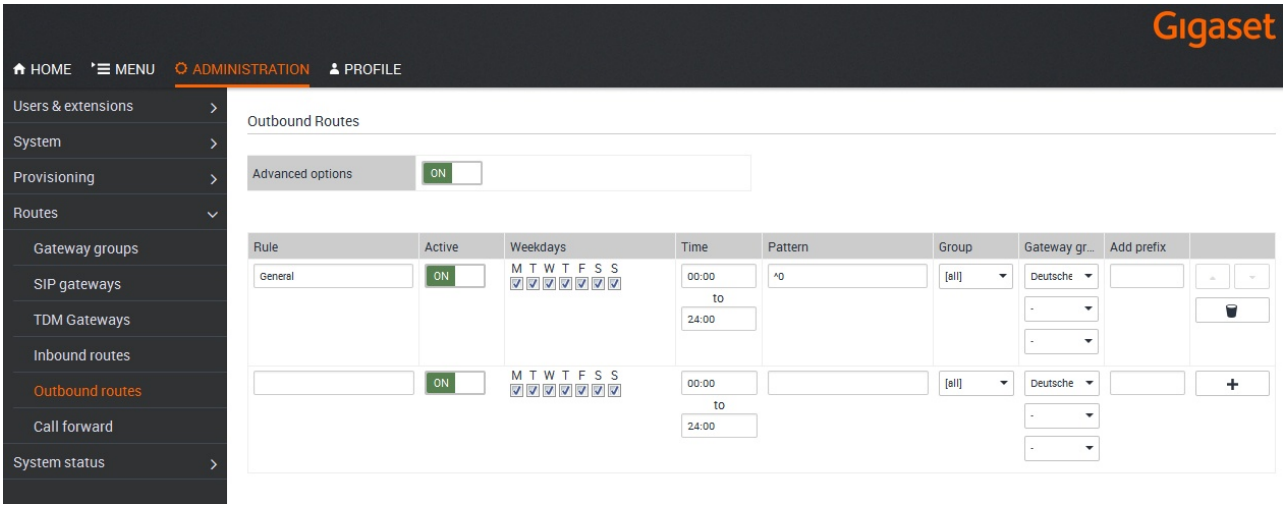
When the PBX finds an according extension it will route the call to it.

But you can add here exceptions from this rule, for example for internal fax users or waiting queues, etc.

Please have in mind the order of these rules, as the system is using **First Match!!!**

Outbound routes

In the Gigaset PBX go to *"Administration" - "Routes" - "Outbound routes"* activate the Advanced options by clicking it to **'ON'** and then pressing **Show.**



Example of Deutsche Telefon Standard Trunk Outbound routes.

Rule

Enter here a name for the according rule.

Date / Weekdays / Time

With these settings you can configure a time-controlled routing.

Pattern

In the pattern you define how the outside line is seized. In our example all dialled numbers starting with '**0**' will use the Gateway group Deutsche Telefon Standard Trunk.

Remark: For calling anonymous to external parties, use the CLIR-setting in the HOME screen of the user!

Fax support

Following table shows you the current state (12.08.2016) of supported fax constellations. These results are without a guarantee. Due to different end-devices, configuration of PBX or other settings the fax transmission might fail. More info about fax via VoIP networks can be found here.

Receiving	**Sending**			
	Internal FXS	Internal T38-Fax	External T38-Fax	External machine-Fax
Internal FXS	---	---	**OK***	**OK***
Internal T38-Fax	---	---	**OK****	**OK****
External T38-Fax	**OK***	**OK****	---	---
External machine-Fax	**OK***	NOK	---	---

Used devices or services:

Canon Fax-L100 (internal FXS), www.minifax.de (external SW-Fax), Triumph Adler DCC 2725 (external machine-Fax)

* = T38 option in SIP gateway deactivated

** = T38 option in SIP gateway activated