

Interop T440/T640 2.0 Equada VoIP-Trunk

Equada VoIP-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 |



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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 numbers:

0891234567[0-9]

And we choose following internal numberblock:

67[0-9]

And we have no line-prefix.

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.

Equada Web-Portal

Important

In order that the incoming caller-ID from external callers are presented correctly, you have to change the default setting in the Equada Web-portal.

Go to `Einstellungen --> VoIP Trunk --> Format der Rufnummer`
(menu on the right side)

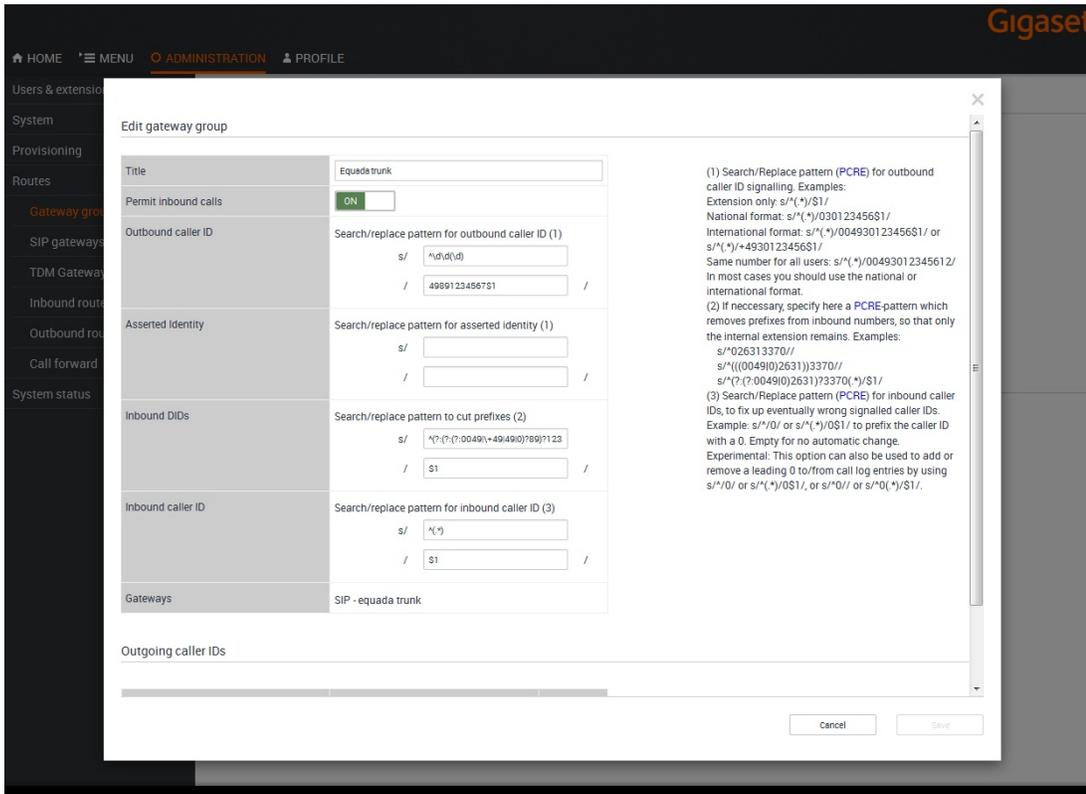
Select "Zielnummer: Ohne Präfix" and "Anrufernummer: National"



The screenshot shows the Equada Web-Portal interface. At the top, the logo 'equada' is visible with the tagline 'Cloud Lösungen nach Maß'. The user is logged in as 'Martin Hermann' with account number '15690'. The navigation menu includes 'HOME', 'ANRUF', 'KONTO', 'EINSTELLUNGEN', 'DIENSTE', and 'HILFE'. The current page is 'Rufnummernformate bei eingehender Telefonie' under the 'VoIP-Trunk' section. The settings are as follows:

| Setting | Value |
|----------------|------------------------------------|
| Zielnummer: | Ohne Präfix (zB. 49030) - Standard |
| Anrufernummer: | National (zB. 030) |

A green 'Speichern' button is located below the settings. On the right side, there is a dropdown menu for 'Trunk 7884' and a 'VoIP-Trunk konfigurieren' section with links for 'Übersicht', 'Weiterleitungen', 'Passwort ändern', 'Fax2Mail', 'Format der Rufnummer', and 'Erweiterte Einstellungen'. Below that is a 'Quicklinks' section with links for 'Meine Rechnungen', 'SMS Versenden', and 'Fax Versenden'.



Example of Equada VoIP 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: **0891234567\$1**, where the **\$1** represents the changing part).

For external calls, we will present e.g. **08912345678** to the provider, and he will take care about the correct representation to the called party.

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 Equada VoIP Trunk, you can leave these fields empty.

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 the external number of the caller "as-is" to the phone (e.g. **089987654321**). 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 contract or VoIP trunk data you received from the provider.

The screenshot shows the 'Edit SIP gateway' configuration page for 'equada trunk' in the Gigaset PBX administration interface. The page is divided into a left sidebar with navigation options and a main content area. The main content area is split into a form on the left and a list of notes on the right.

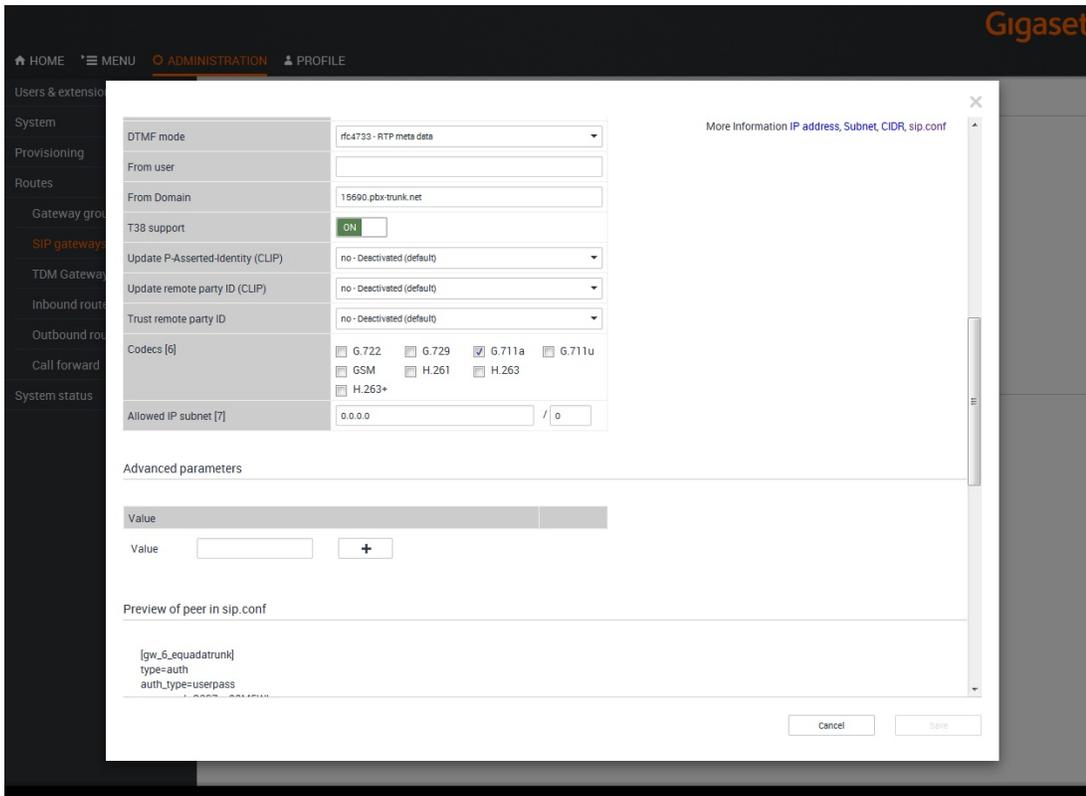
Form Fields:

- Title: equada trunk
- Name: gw_6_equadatrunk
- Registrar: 15690.pbx-trunk.net
- Proxy [1]:
- User [2]: 15690.pbx-trunk.net
- Password: [Redacted]
- Allow outbound calls: ON
- Register: ON
- Language: de - German (de-DE)
- Dial command [3]: P,SIP/{prefix}{number}@{gateway}
- Transport name: default-udp
- Source of destination number: INVITE request line
- Group [4]: Equada trunk
- Port [5]: 5060
- NAT: Force port
- Redirect RTP stream: Do not reroute RTP stream (default)
- Check availability: ON
- Simultaneous calls: 0 (0 for unlimited (default))

Notes:

- (1) Empty for no proxy.
- (2) For some SIP providers, it might be necessary to use the format user@domain. (domain is then used in the From header, which equals fromdomain in Asterisk.)
- (3) String for the Dial()-command. T440/T640 PRO will automatically replace {number} by the called number, {number:1} without the first digit and {gateway} with the internal description (e.g. gw_1.amt).
- (4) In order to use gateways, they must be assigned to a gateway group.
- (5) When specifying the port (standard SIP port: 5060), it will be directly used. Without a DNS lookup of the SRV record _sip_udp of the domain (or server) will be performed upon dialout. More Information Srv Resource Record, Srv Resource Record (en), CIDR, SIP-DNS-Srv-Records, SIP-DNS-Srv-Records (en), SIP-DNS-Srv-Records (en)
- (6) The priority of the codes is from left to right and top to bottom
- (7) Useful settings are e.g.
0.0.0.0/0, to allow calls from all IP addresses,
192.0.2.0/24 to allow calls originating from network 192.0.2.*,
192.168.0.0/16 to allow calls originating from network 192.168.*.*,
192.168.1.1/32 to allow calls originating from IP address 192.168.1.1, etc.

Example of Equada VoIP trunk gateway settings 1/2.



Example of Equada VoIP trunk gateway settings 2/2.

Registrar

Use here the **SIP-Server / Registrar** (received by Equada, visible in the web-portal).

15690.pbx-trunk.net

Proxy

Can be left empty.

User

Enter here the **Username** (Benutzername), followed by '@15690.pbx-trunk.net'. You have to enter the realm behind the username in order to properly register the trunk at the provider.

For example

0891234567@15690.pbx-trunk.net

Dial command

The dial command is the command which is used in the asterisk software. The term **{number}** means, that the number (e.g. **089987654321**) is dialled as entered. If you use a line access code (in most cases '0' is used), you have to add ':1' after "number".

Group

Select here the previously created gateway group.

Update remote party ID or P-Asserted-Identity (CLIP)

These settings can be left on the default setting (no - Deactivated)

From Domain

Enter here the **Domain/Realm** delivered by Equada

15690.pbx-trunk.net

T38 support

In order to have a better fax-support for fax-machines, connected to the FXS ports activate this option.

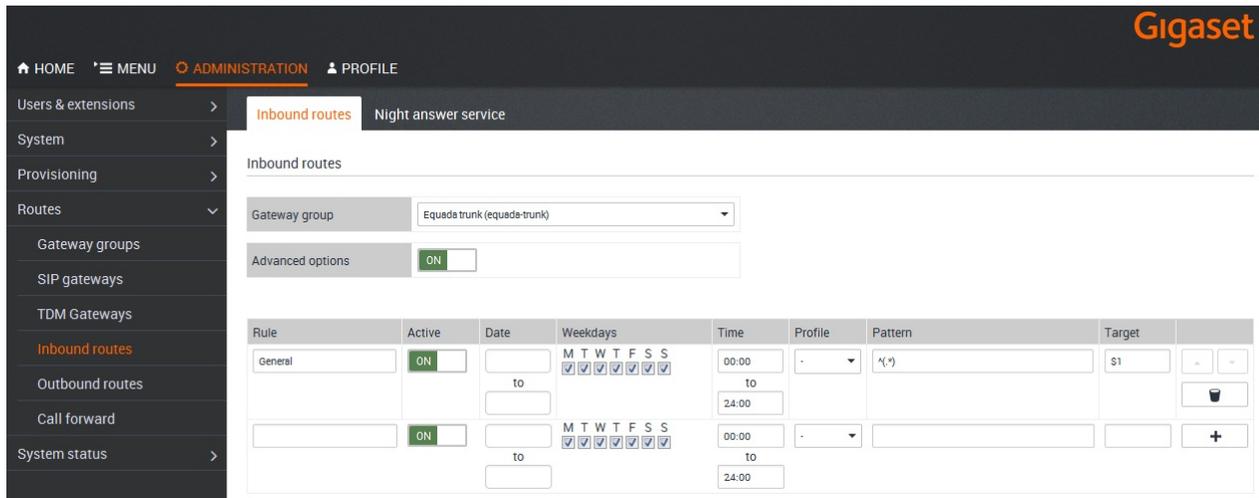
All tested scenarios were ok with this parameter activated.

Underneath the configuration parameter you will see a preview of the complete 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**.



The screenshot shows the Gigaset PBX administration interface. The top navigation bar includes 'HOME', 'MENU', 'ADMINISTRATION', and 'PROFILE'. The sidebar menu on the left lists various system settings, with 'Inbound routes' selected. The main content area displays the 'Inbound routes' configuration for the 'Equada trunk (equade-trunk)' gateway group. It features a table with columns for Rule, Active, Date, Weekdays, Time, Profile, Pattern, and Target. The table contains two rows: one for a 'General' rule and another for a new rule. The 'General' rule is active and has a pattern of '^(*)' and a target of '\$1'. The new rule is also active and has a pattern of '^(*)' and a target of '\$1'. The 'Advanced options' are set to 'ON'.

Example of Equada VoIP 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**.

HOME MENU ADMINISTRATION PROFILE

Users & extensions >
System >
Provisioning >
Routes >
Gateway groups
SIP gateways
TDM Gateways
Inbound routes

Outbound Routes

Advanced options ON

| Rule | Active | Weekdays | Time | Pattern | Group | Gateway gr... | Add prefix |
|--------------|-----------------------------|--------------------------|----------------------|---------|-------|---------------|------------|
| Equada trunk | <input type="checkbox"/> ON | M T W T F S S ☑☑☑☑☑☑☑ | 00:00 to 24:00 | *0 | [all] | Equada t | |

Example of Equada VoIP 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 Equada VoIP 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 (29.08.2016) 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** | OK** | --- | --- |

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