

Tekaba

Installation & Configuration Guide
Version 1.3

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<http://www.kaplansoft.com/>

Tekaba is built by Yasin KAPLAN

Read “Readme.txt” for last minute changes and updates which can be found under application directory.

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Table of Contents

Table of Contents	3
Introduction	4
System Requirements	4
Installation	4
Configuration	4
Settings Tab	4
Adding Ports	6
Telephony Routes	6
Service Monitor	7

Introduction

Tekaba is a SIP media gateway (*Based on RFC 3261*) runs under Windows (*Vista/7/8/10/11, 2008-2022 Server*). Visit <https://www.kaplansoft.com/tekaba> regularly for updates.

Major features:

- Simple, easy to use interface.
- Real time monitoring of active calls.
- Forwards incoming SMS as a SIP MESSAGE request.
- Accepts SIP MESSAGE requests and sends message content as SMS.
- Source IP address, source prefix, destination prefix-based telephony routing.
- Supports G.711 A - Mu law codecs.
- Supports NAT traversal. Tekaba also supports UPnP.
- Supports call transfers by using SIP REFER method (*RFC 3515*)
- Supports UDP, TCP and TLS transports with RTP and SRTP.

You need to add necessary mappings to your router for incoming RTP traffic if Tekaba installed behind a NAT gateway which does not support UPnP.

System Requirements

Tekaba requires Microsoft .NET Framework 4.0 installed with the latest patches. Pentium i3 class CPU with 2 GB of RAM is ideal for most configurations. A 3G USB Modem with Huawei chip which supports audio required. The freeware edition supports maximum one call at a time.

Installation

Unzip “Tekaba.zip” and click “Setup.exe” comes with the distribution. Follow the instructions of setup wizard. Setup will install Tekaba, add a shortcut for Tekaba to desktop and the start menu.

Configuration

Run Tekaba Manager from Start Menu / Program Files / Tekaba.

Tekaba also checks if it is installed behind an UPnP supported NAT gateway. Tekaba also adds a reverse mapping for incoming UDP connections automatically (*Default UDP port 5080*).

Settings Tab

Click the Settings Tab to start configuration.

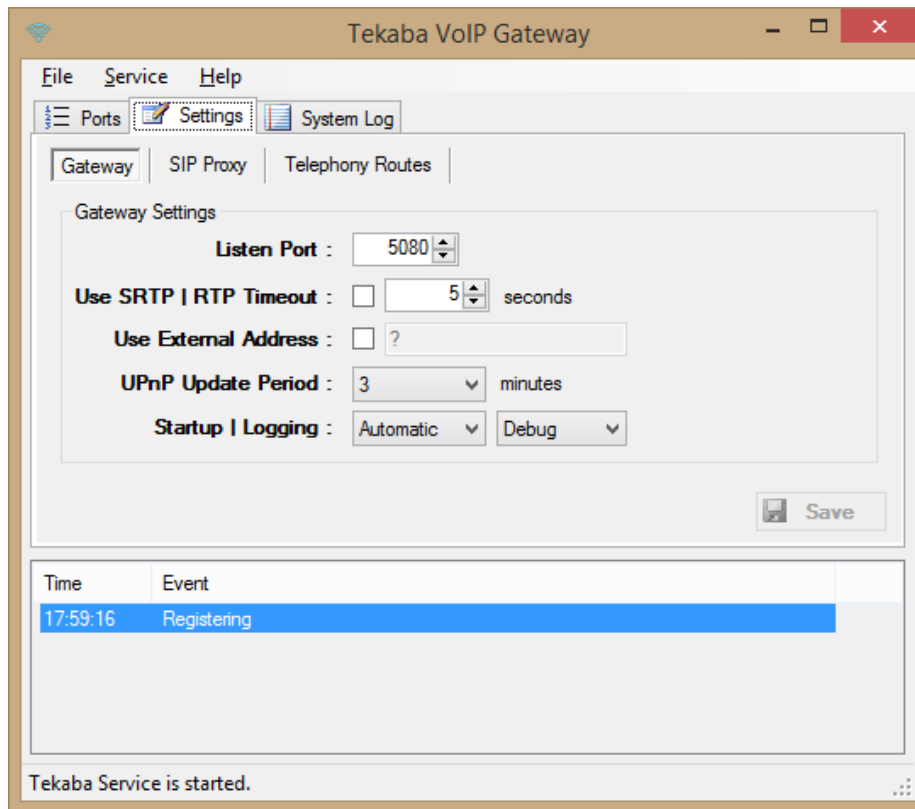


Figure - 1. Tekaba Gateway Settings

Enter following information in Gateway tab:

- **Listen Port:** You can define a port number to be listened (*Default 5090*).
- **Use External Address:** If Tekaba is installed behind a NAT gateway which does not UPnP you can set external IP address manually for NAT traversal. If your NAT gateway supports UPnP set UPnP Update Period to value greater than “0”.
- **Logging:** Select logging level of Tekaba. Select “None” if you do not want logging, select “Errors” to log errors and select “Sessions” to log session information and errors. Log files are located under <Application Directory>\Logs directory.
- **UPnP Update Period:** You can specify period of querying UPnP Internet Access Gateway. Set “0” to disable UPnP support.

Enter following information in SIP Proxy tab:

- **SIP Domain:** Enter a FQDN or an IP address of your SIP domain. You have to configure a valid SIP domain for proper operation.
- **SIP Proxy:** Enter the FQDN of your SIP domain. Please make sure that this address is resolvable by your SIP client and has a valid entry (*an A record*) in your DNS server if you enter a FQDN. You must configure a valid SIP proxy for proper operation.
- **Register:** SIP endpoint registration is disabled by default. If this option is enabled Tekaba tries to register itself to configure SIP Domain.
- **Account ID:** You must specify a SIP endpoint ID for Tekaba. This ID is used by Tekaba while registering to SIP registrar.
- **Password:** If SIP registrar requires password authentication specify password.
- **Registration Timeout:** You can specify registration timeout in seconds. Default is 600 seconds.

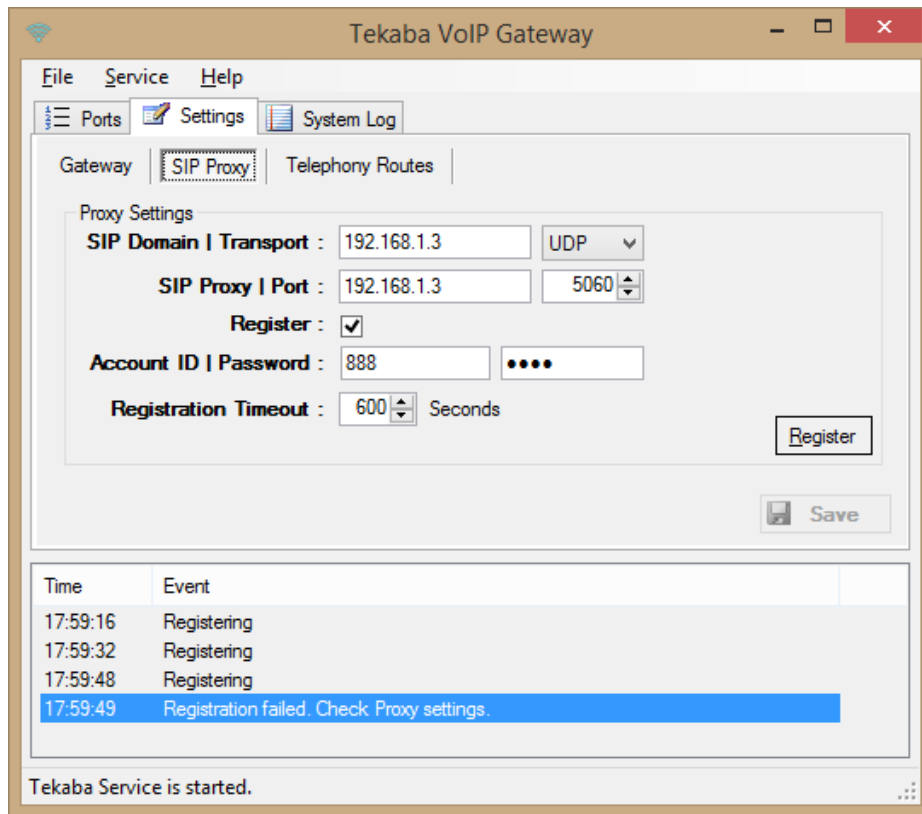


Figure - 2. Tekaba Sip Proxy Settings

If you click [Save] button setting will be saved and activated immediately. You can click “Register” to SIP registrar/proxy manually.

Adding Ports

You need to have at least one 3G USB modem with audio support for the operation. You can plug in a USB modem either before or after starting Tekaba. Tekaba will recognize the modem and display the status of the modem in Ports tab. You can double click on modem enter to enter PIN If PIN entry needed. You need to assign a trunk number first. It is 1 as default. You also need to specify a VoIP route to forward incoming calls to a SIP endpoint. You just need to enter SIP endpoint Id or phone number of the endpoint. You can do these settings by right clicking on the modem entry. Finally, you must enable the port for the operation.

Telephony Routes

You can specify telephony routes for VoIP to telephony destinations. Tekaba will select the best matching route to forward a VoIP call or SIP MESSAGE requests as SMS to a telephony destination. You can specify Source IP Address, Source phone number (*Prefix*) and Destination phone number (*Prefix*) and destination trunk. Tekaba will not route VoIP calls and SIP MESSAGE requests as SMS if you do not specify telephony routes. You must enter a specific IP address as Source IP Address; subnet-based source IP address definition is not supported. You can enter * to allow all values in Source IP Address, Source Prefix and Destination Prefix parameters.

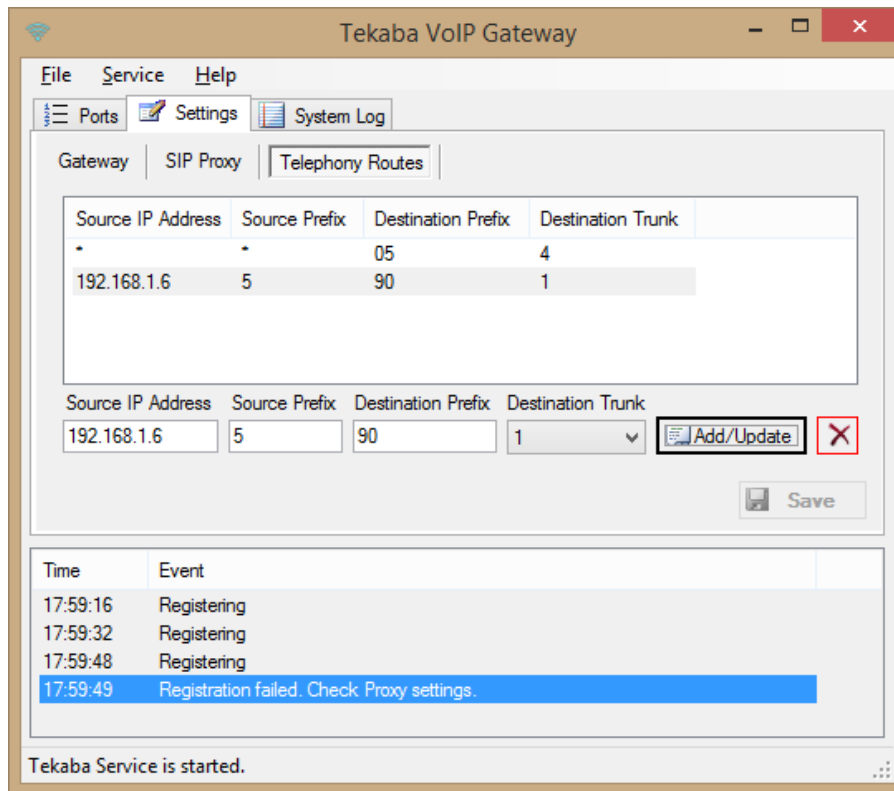


Figure - 3. Tekaba Telephony Routes

Service Monitor

You can monitor active calls and port status through the service monitor tab. You can clear log entries by right clicking on Event Log list.

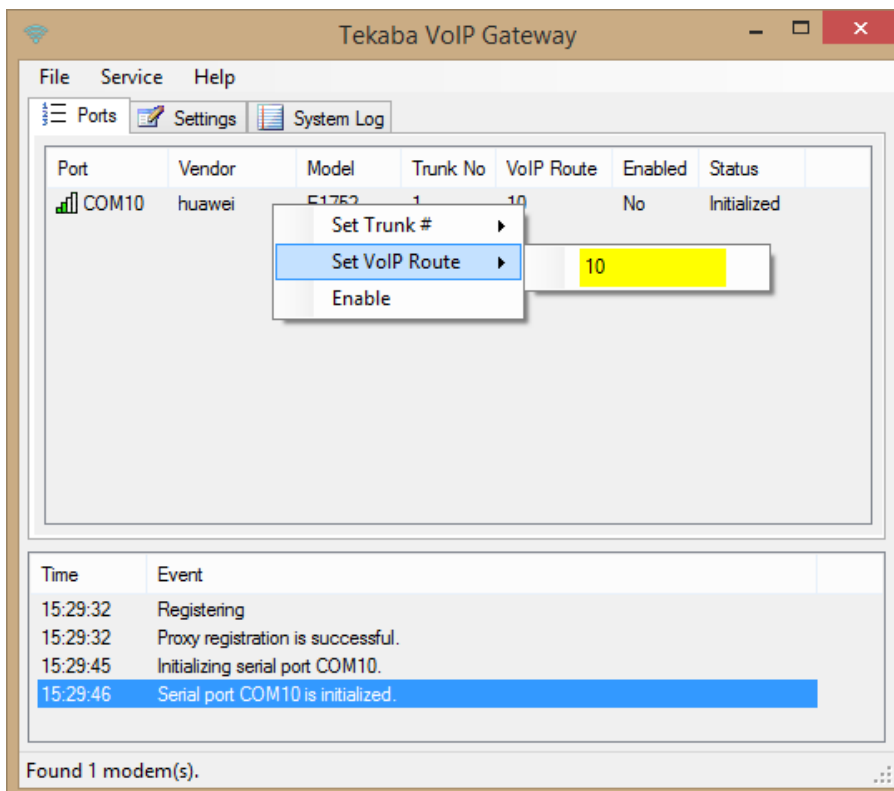


Figure - 4. Service Monitor Tab