Tutorial

Step-by-step guides: quick start, license registration, securing your server and common setup recipes.

- Quick Start Guide
- Registering Your License
- Securing Your Server
- Common Setup Recipes

Quick Start Guide

From a fresh installation to the first subscriber online, step by step. Each step links to the detailed help.

1. **Install and log in.** Install the server, set network and time zone, log in and change the admin password. See the Installation chapter.
2. **Register the license.** See Registering Your License.
3. **Basic settings.** In *Settings* → *general settings* set currency and time zone; in *Settings* → *sites* your company name and logo; in *Settings* → *advanced* check *User Idle Timeout* (2–3 times your router's interim interval).
4. **Add your router.** *NAS* → *Actions* → *New*: name, IP address, shared secret, type *Mikrotik*, version *Mikrotik 6.36 or higher*, Incoming (COA) Port *1700*.
5. **Configure the router.** On the MikroTik:

   ```
   /radius add service=ppp,hotspot address=SAS_IP secret=SECRET timeout=3000ms
   /radius incoming set accept=yes port=1700
   /ppp aaa set use-radius=yes accounting=yes interim-update=1m
   ```

   Disable MS-CHAP on the PPPoE server and create the IP pools you will use in profiles.
6. **Create profiles.** *Profiles* → *profiles list* → *New*: name, price, speed, duration (Limit Expiration ON), pool name. Optionally create an *Expired* profile for expired users.
7. **Create managers** (optional). Create permission groups in *Settings* → *permission groups*, then resellers in *Managers* → *New*, and give them balance with *Deposit*.
8. **Create a user.** *Users* → *Users List* → *Actions* → *New*: username, password, profile.
9. **Activate the user.** *Actions* → *Activate*, payment method *Manager Balance*.
10. **Connect.** Configure the username and password on the subscriber's router (PPPoE). The user appears in *Users* → *Online Users*.
11. **If the user can't connect**, check *Log* → *User Auth Log* for the reason.
12. **Protect your data.** Set up daily backups (*Settings* → *backup*) and see Securing Your Server.

Registering Your License

Every SAS Radius server needs a license. The license decides how many users you can have and which add-ons are included. You register it in the Snono client portal using your server's **Hardware ID**.

1. Copy the Hardware ID from SAS Radius

1. Log in to your SAS Radius panel.
2. Open *Settings* → *license*.
3. Copy the **Hardware ID**.

2. Register the license in the client portal

1. Log in to the Snono client portal: client.snono-systems.com (create an account if you don't have one).
2. Go to **My Products → License**.
3. Click **Add Product**, then **Register License**.
4. Paste the **Hardware ID** you copied from SAS Radius and complete the registration.

3. Check the license in SAS Radius

1. In SAS Radius, open *Settings* → *license* again and click **Reload License**.
2. The status should be **Active**, with your number of users.

- The server must be able to reach `license.snono.systems` on the internet at all times.
- Reinstalling or changing the server hardware can change the Hardware ID; contact Snono support to move the license.
- When the license is not active, only system administrators can log in.

Securing Your Server

Your SAS Radius server holds your customers' data and controls your network. Follow these recommendations.

Accounts

- Change the default `admin` password right after installation, and the server console passwords.
- Give each staff member and reseller their own manager account with the smallest permission group they need.
- Enable **two-factor authentication** for administrators (account menu → Profile → 2FA Setup).
- Use *Enforce Manager Password Strength*, login captcha and *Block manager login after login fails* (Settings → general settings / web).
- Give permissions marked *(Dangerous!)* only to trusted staff.

Network

- Allow incoming traffic only where needed: RADIUS (UDP 1812/1813) from your routers, the web panel (80/443) from your offices or VPN.
- **Don't expose SSH to the internet.** If remote SSH access is needed, allow it only from known addresses and use keys instead of passwords.
- Allow outgoing traffic, at least to `license.snono.systems` and the update servers.
- Use HTTPS with a valid certificate for the panel and user portal.

Data

- Enable daily backups to a separate disk and Google Drive, and download a copy regularly.
- Install SAS Radius updates (*Tools* → *System Update*).
- Review the *System Log* for unexpected logins or *security/violation* events.

> If the server shows unusual high CPU or unknown processes, it may be compromised. Contact Snono support immediately and don't reboot or delete anything before evidence is collected.

Common Setup Recipes

Short guides for frequent tasks. Each links to the detailed pages.

I want to…	How
Let expired users reach a renewal page instead of being rejected	Create an Expired profile (type FUP, Limit Expiration OFF, own pool) and set it as *Expired Next Profile*. See *Setting Up Expired Users* (Profiles).
Slow users down after a quota instead of cutting them off	Use *Quota Next Profile*. See *Setting Up FUP* (Profiles).
Give free night traffic	Add a Time-Based Policy with target *Accounting* 0%. See *Time-Based Policies*.
Sell extra GB or a free 2-day extension	Create an Extension profile. See *Extension Packages*.
Compensate all users after an outage	Bulk Changes → *Increase Expiration (Days)*, or Compensations for an approval workflow.
Sell through resellers	Create managers, set prices in the *Pricing List*, and deposit balance.
Sell prepaid cards in shops	Generate refill cards, design and print them. See the Cards System chapter.
Let resellers top up online	Enable a payment gateway with *Enable Managers Deposits* . See *Payment Gateways Settings*.
Find out why a user can't connect	*Log → User Auth Log*. See *User Auth Log and Login Errors*.
Fix expired users that stay online	Check the Disconnect/CoA configuration on the router. Also, make sure Limit Expiration is enabled in the profile and that the system timezone and database server time are properly synchronized.
Send all subscribers a message	*Tools → Announcements*.
Brand the panel for a partner	*Settings → sites*.