Synology Security Guide & Best Practices

Steps for securing Synology NAS system

User Security & Access Control

The majority of NAS security needs to be done preventatively to easily recover from potential issues that might arise in the future.

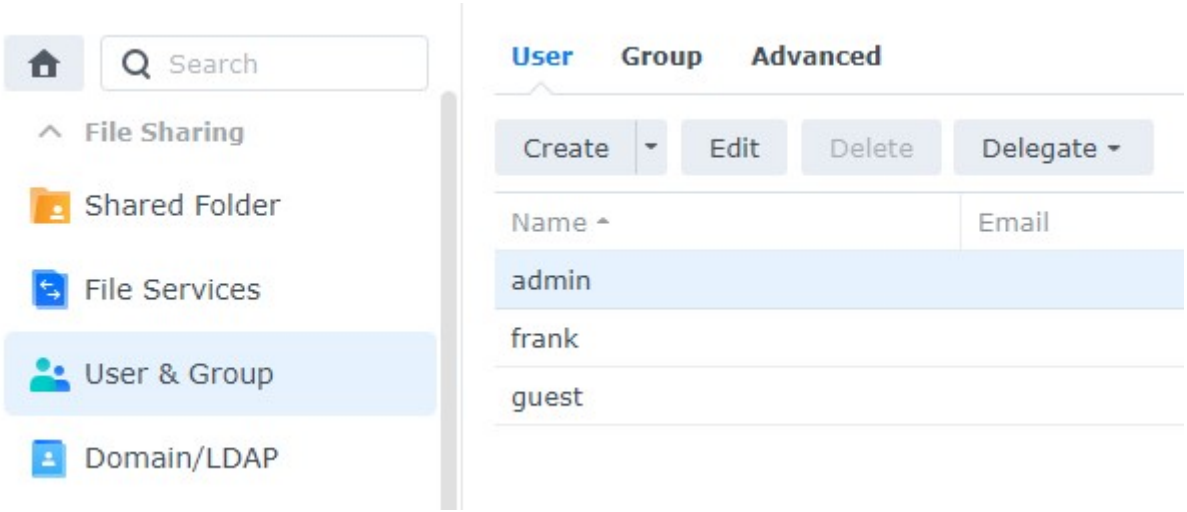
It’s important to note that cybersecurity is always evolving and staying up to date with best practices is important. These are things I normally change, but depending on your needs, you can potentially secure your NAS even further.

Making sure that every user on NAS system is properly created, assigned, and given least amount of privilege, can help with reducing any type of cyberattack.

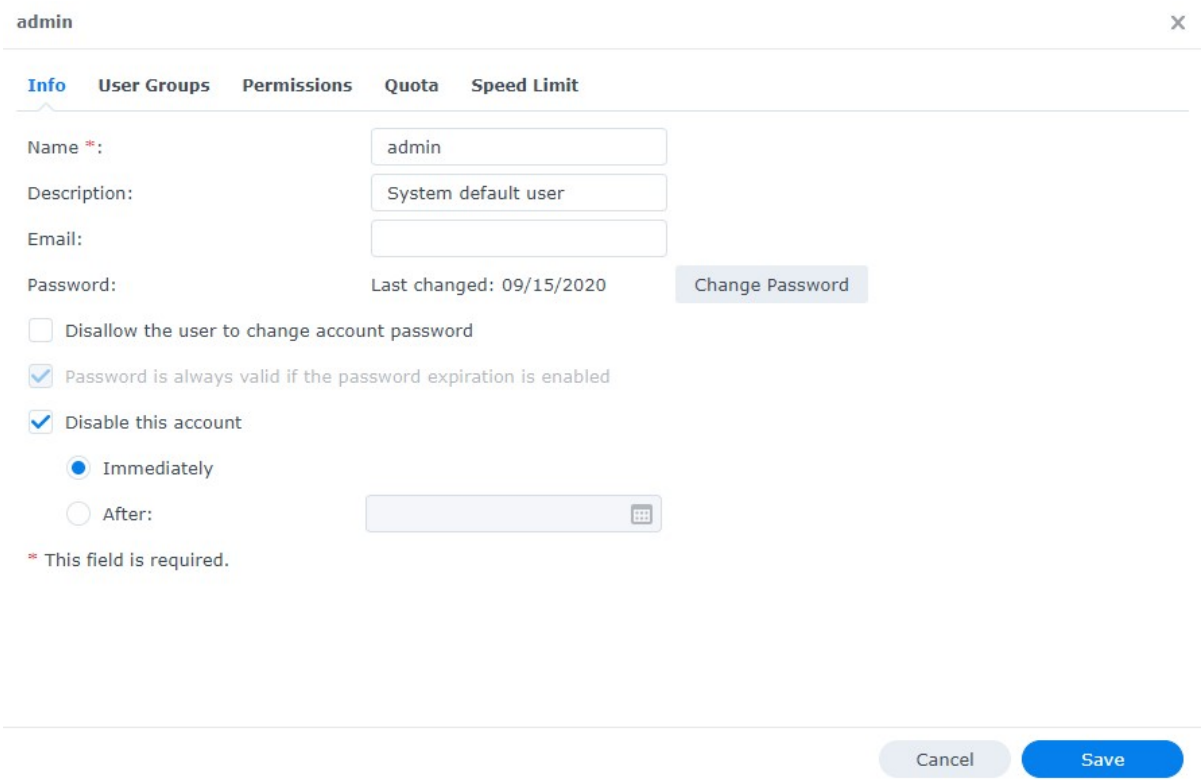
Disable Admin Account

First we must create a new user and ensure that they have admin permissions before disabling the admin user. Disabling Guest account is good practice as well, but it's personal preference, if group based access is properly managed.

1. Select **Control Panel,** then select **User & Group** and **Edit** the admin user

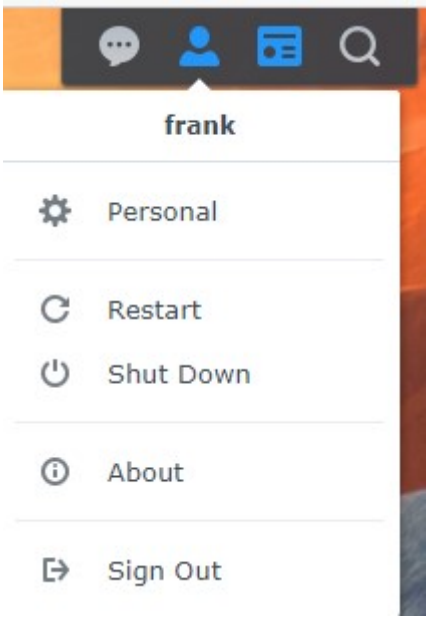


1. Select **Disable this account**, then select **Save**. This will ensure that the admin account is disabled

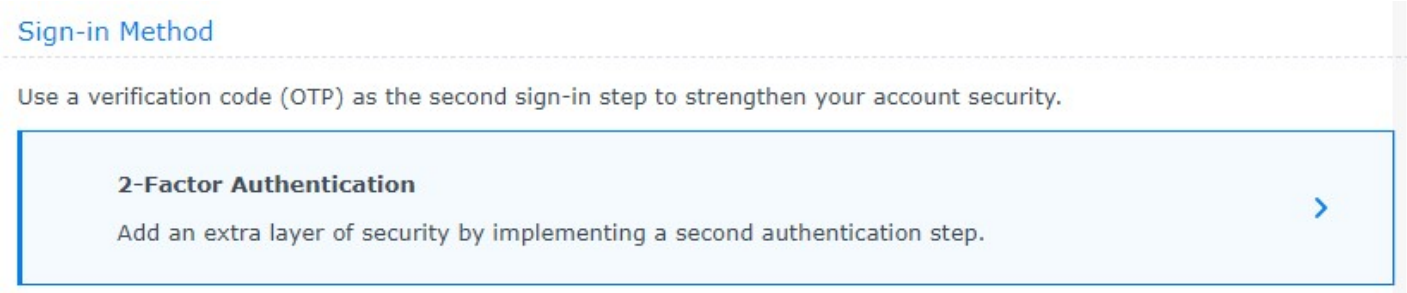


Enable Two Factor Authentication

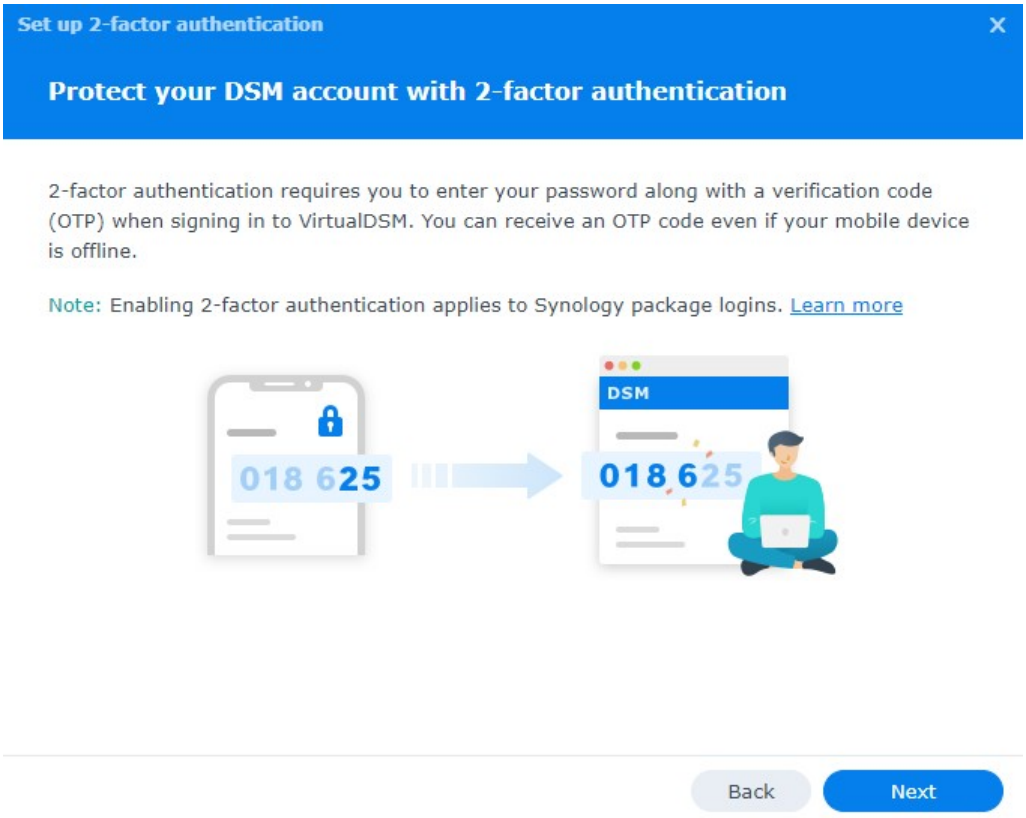
1. Select the **Person** icon in the top right and select **Personal**



2. Select **Enable 2-step Authentication.** The email service will need to be enabled for this



3. Select **2-step Authentication**, then **Verification code (OTP)**.
4. Select **Next** to protect your DSM account with **2-factor Authentication**

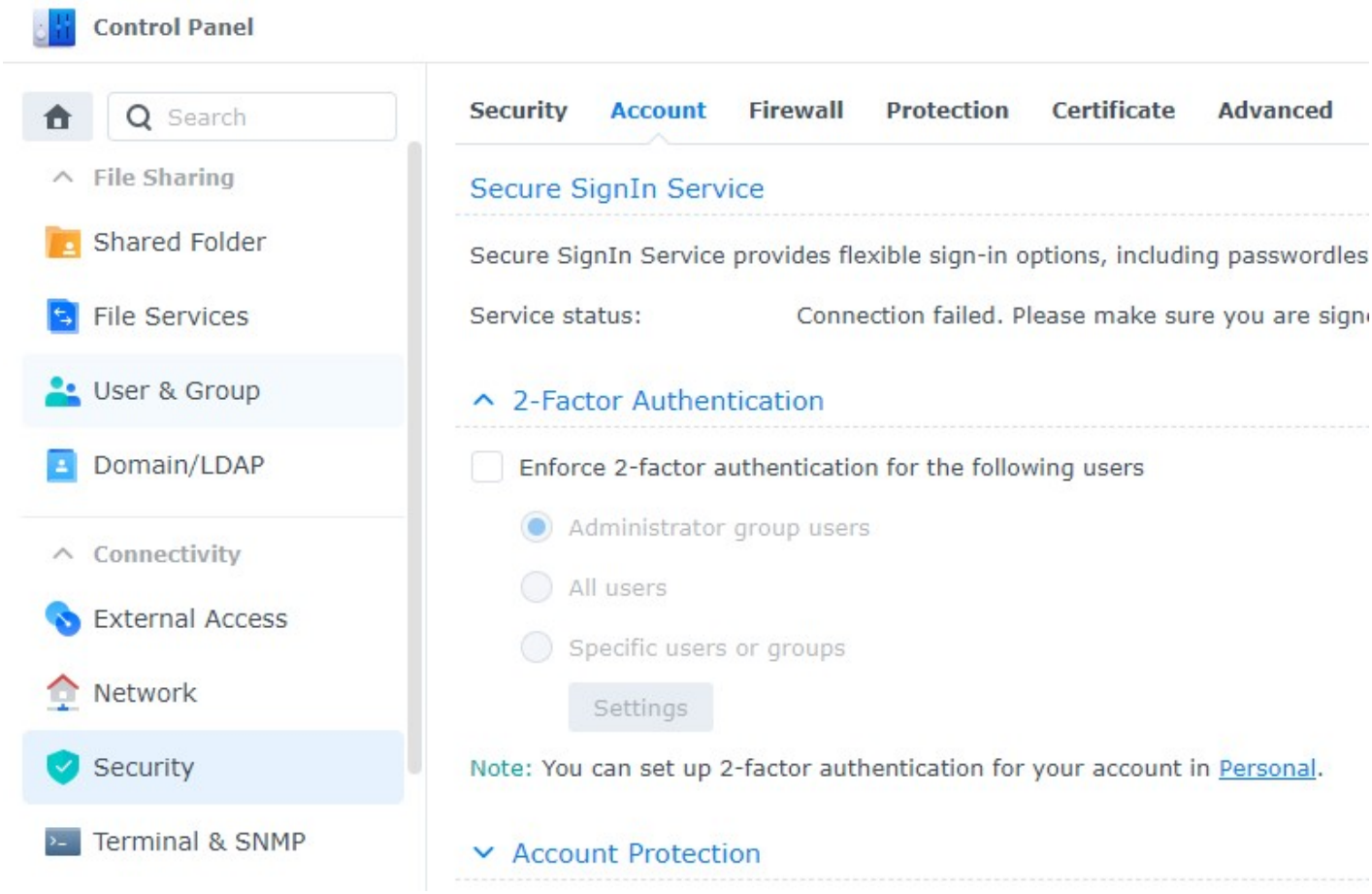


The next section will suggest that you install Synology's Secure SignIn. **This is not required.** This is simply Synology's TOTP application – you are free to use whatever TOTP application you'd like.

5. Scan the **QR code,** enter the **code,** then select **Next.**
6. Set up the **Email service provider,** then select **Next**
7. Two- factor authentication is now set up

If you'd like to force all users to set up two-factor authentication

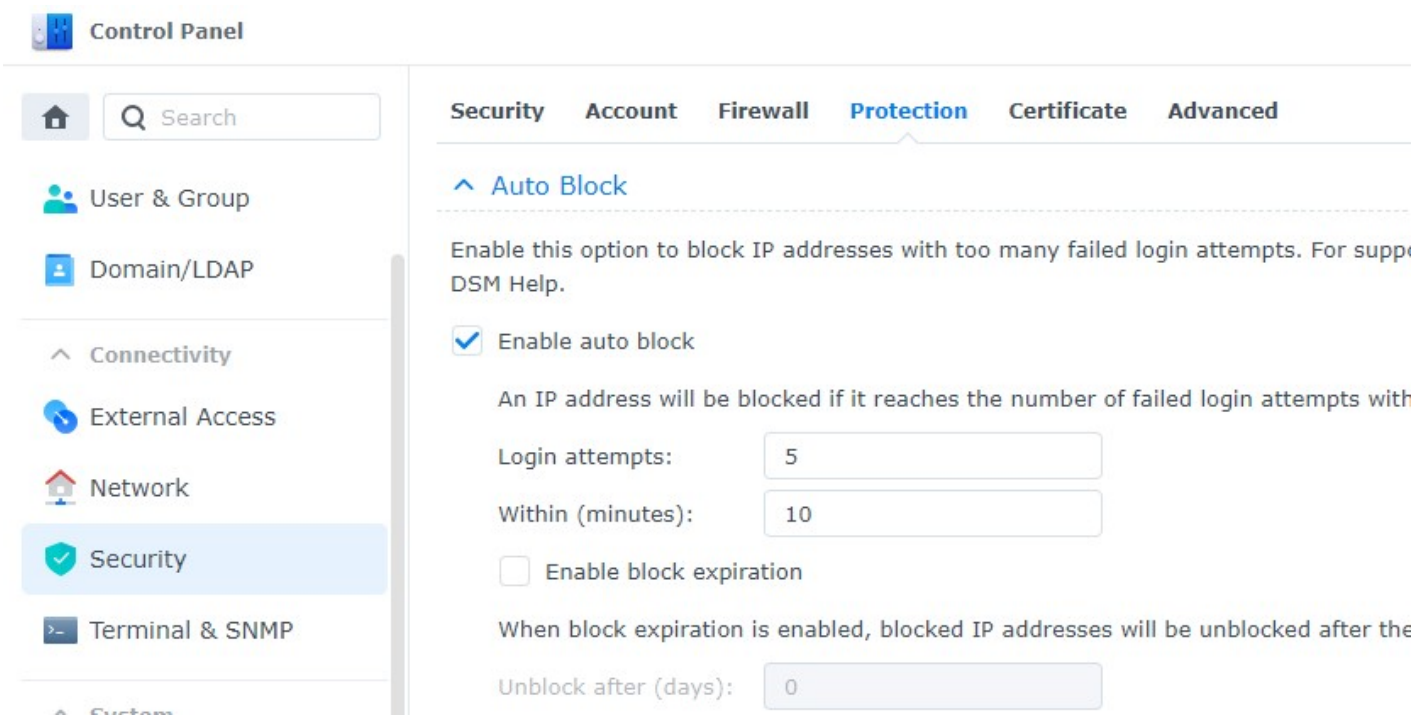
1. Go to **Control Panel**
2. Under **Security** select **Account** and under 2-Factor Authentication select All users or Specific users or groups. It's good idea to have any users that can remotely access NAS to have MFA setup, both TOTP and Push Notification with **Synology Secure SignIn**



Enable Auto Block

Auto block will automatically block IP addresses that have failed a certain number of logins during a certain period of time.

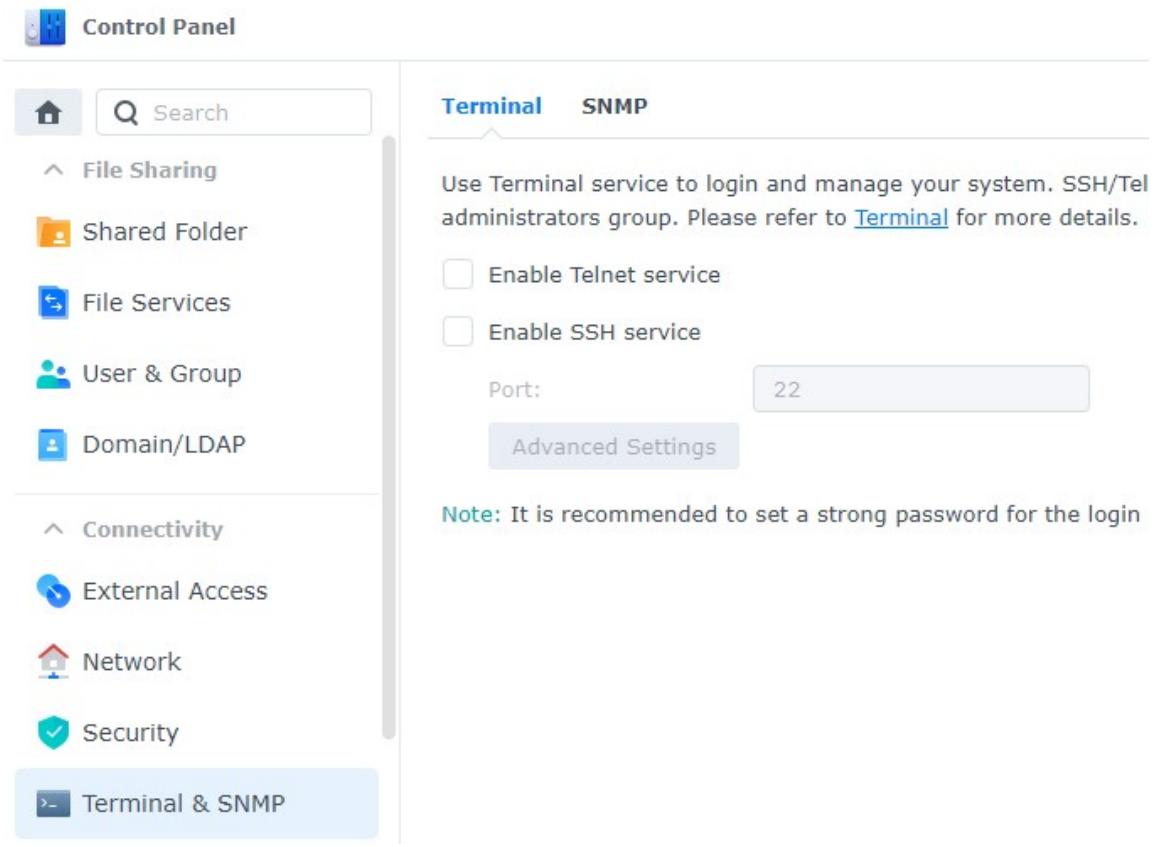
1. Open **Control Panel** and select **Security**
2. Select **Account.** Ensure **Enable auto block** is selected. Set the **Login Attempts** and **Within parameters** to be what you'd like, then apply. This will ensure that IP addresses are automatically blocked after a certain number of failed login attempts



Disable SSH

There are multiple reasons why you might want to use SSH, but if you're not **actively** using it, you should disable it. Even if you enable two-factor authentication above, SSH does **not** use it. For this reason, if your network is compromised, an attacker can try and brute force your password through SSH.

1. Open **Control Panel,** then select **Terminal & SNMP.**
2. Ensure that **Enable SSH** service is not checked off.


Control Panel
Search
File Sharing
Shared Folder
File Services
User & Group
Domain/LDAP
Connectivity
External Access
Network
Security
Terminal & SNMP
Terminal
SNMP
Use Terminal service to login and manage your system. SSH/Tel
administrators group. Please refer to Terminal for more details.
Enable Telnet service
Enable SSH service
Port:
22
Advanced Settings
Note: It is recommended to set a strong password for the login

Remote Access Setup

Synology Firewall Setup