

Menu

How to Install Affine on Your Synology NAS

10 February 2024

by Marius Bogdan Lixandru



AFFiNE is a next-gen knowledge base that brings planning, sorting, and creating all together. Form your knowledge console at your wish. Open-source, privacy-first, and always free. AFFiNE is an alternative to Notion and Miro. It's a workspace with fully merged docs, whiteboards and databases. In this step by step guide I will show you how to install **AFFiNe** on your **Synology NAS** using Docker & Portainer.



Please Support My work by Making a Donation.

STEP 2

Install **Portainer using my step by step guide**. If you already have Portainer installed on your Synology NAS, skip this STEP. **Attention**: **Make sure you have installed the latest Portainer version**.

STEP 3

Make sure you have a synology.me Wildcard Certificate. Follow my guide to get a Wildcard Certificate. If you already have a synology.me Wildcard certificate, skip this STEP.

STEP 4

Go to **Control Panel / Login Portal / Advanced** Tab / click **Reverse Proxy**. Follow the instructions in the image below.

Control Panel	
Q Search	DSM Applications Advanced
Erminal & SNMP	Reverse Proxy
∧ System	Your Synology NAS can act as a reverse proxy server that transfers requests from the Internet to devices in the local network.
🕴 Info Center	Reverse Proxy
🛃 Login Portal	Access Control Profile
🏹 Regional Options	You can create access control profiles to restrict user access according source IP. 🤅
Notification	Access Control Profile
😗 Hardware & Power	
1 External Devices	
t ↓ Update & Restore	
∧ Services	
🗞 Synology Account	
Application Privileges	
Indexing Service	
Task Scheduler	

Now click the "**Create**" button. Follow the instructions in the image below.

Control Panel		? — 🗆 X
Q Search	DSM Applications Advanced	
► Terminal & SNMP	Reverse Proxy	
∧ System	Reverse Proxy	× evices in the local network.
🕴 Info Center	Create Edit Delete	
🛃 Login Portal	Desc Source Destination	
🔀 Regional Options		
Notification		
😗 Hardware & Power		
External Devices		
📢 Update & Restore		
∧ Services	items (2
ᡖ Synology Account	Class	
Application Privileges	Close	
Q Indexing Service		
🛗 Task Scheduler		



After you click the Create button, the window below will open. Follow the instructions in the image below.

On the General area, set the Reverse Proxy Name description: type in **Affine**. After that, add the following instructions:

Source:

Protocol: **HTTPS** Hostname: **affine.yourname.synology.me** Port: **443**

Check Enable HSTS

Destination: Protocol: HTTP Hostname: localhost Port: 3010

	Advanced Settings
Reverse Proxy Name:	Affine
Source	
Protocol:	HTTPS -
Hostname:	affine.mariushosting.synok
Port:	443
Enable HSTS	
Access control profile:	Not configured 👻 🧯
Destination	
Protocol:	HTTP -
Hostname:	localhost
Port:	3010

On the Reverse Proxy Rules click the **Custom Header** tab. Click **Create** and then, from the drop-down menu, click **WebSocket**. After you click on WebSocket, two Header Names and two Values will be automatically added. Click **Save**. Follow the instructions in the image below.

Reverse Proxy Rules	х	Reverse Proxy Rules		
General Custom Header Advanced Settings		General Custom Header Advance	d Se 🔀 DONA	JΕ
Create Delete		Create - Delete		1
Create Value	:	Header Name	Value	
WebSocket		Upgrade	<pre>\$http_upgrade</pre>	
		Connection	\$connection_upgrade	
(1) Ditems	G	2 Click S	ave	G
o items	Ŭ		2 items	
Cancel Save			Cancel Save	

Go to **Control Panel / Network / Connectivity** tab/ Check **Enable HTTP/2** then click **Apply**. Follow the instructions in the image below.

Control Panel		? — 🗖 🗙
Q Search	General Network Interface Traffic Control Static Route Connectivity	
∧ File Sharing	Enable HTTP/2	
5 Shared Folder	HTTP/2 speeds up web page loading when using encrypted connections.	
S File Services	Customize maximum concurrent HTTP connections	
🚢 User & Group	Max connections: 2048	
Domain/I DAP	Enable the "Server" header in HTTP responses	
	Custom "Server" header: nginx	
^ Connectivity	Enable reuseport to enhance high concurrent connection capability for web service	
S External Access		
🔶 Network		
Security		
- Terminal & SNMP		
A. Suctom		
 System 		5
	Reset	Apply



Go to **Control Panel / Security / Advanced** tab **DONATE Enable HTTP Compression** then click **Apply**. F



STEP 10

Go to **File Station** and open the docker folder. Inside the docker folder, create one new folder and name it **affine**. Follow the instructions in the image below.

Note: Be careful to enter only lowercase, not uppercase letters.

docker	< > C docker			\sim	
	Create 👻 Upload 👻	Action -	Tools - Set	ings	= - =
	Name 👻	Size	File Type	Modified Date	
	portainer		Folder	01/07/2024 00:33:50	
	🚞 affine		Folder	02/29/2024 22:48:56	

Now create four new folders inside the **affine** folder that you created at **STEP 10** and name them **storage**, **redis**, **db**, **config**. Follow the instructions in the image below. **Note**: Be careful to enter only lowercase, not uppercase letters.

File Station			?	- = >
 ▼ MariusHosting ▼ docker 	C docker > affine Create • Upload • Action •	Tools - Settings	★ Q - Search	
▼ affine	Name - Size	File Type	Modified Date	
	storage	Folder	02/29/2024 22:55:11	
	db	Folder	02/29/2024 22:55:16	
	Config	Folder	02/29/2024 22:55:28	
				4 items C



Log into Portainer using your username and password. On the left sidebar in Portainer, click on **Stacks** then **+ Add stack**. Follow the instructions in the image below.



• STEP 13

In the Name field type in **affine**. Follow the instructions in the image below.

Note: Copy Paste the code below in the Portainer Stacks **Web editor**.

version: '3.9' services: affine: image: ghcr.io/toeverything/affine-graphql:stable

container name: AFFINE 👳 Donate healthcheck: test: timeout 10s bash -c ':> /dev/tcp/127.0.0.1/3010' || e> interval: 10s timeout: 5s retries: 3 start_period: 90s command: ['sh', '-c', 'node ./scripts/self-host-predeploy && node ./dis ports: - 3010:3010 - 5555:5555 depends on: redis: condition: service healthy postgres: condition: service_healthy volumes: - /volume1/docker/affine/config:/root/.affine/config:rw - /volume1/docker/affine/storage:/root/.affine/storage:rw logging: driver: 'json-file' options: max-size: '1000m' restart: on-failure:5 environment: - NODE OPTIONS="--import=./scripts/register.js" - AFFINE CONFIG PATH=/root/.affine/config - REDIS SERVER HOST=redis - DATABASE_URL=postgres://affineuser:affinepass@po - NODE ENV=production - AFFINE ADMIN_EMAIL=yourown@email - AFFINE ADMIN PASSWORD=mariushosting redis: image: redis:latest container name: AFFINE-REDIS

restart: on-failure:5

volumes: **DONATE** - /volume1/docker/affine/redis:/data:rw healthcheck: test: ['CMD', 'redis-cli', '--raw', 'incr', 'ping'] interval: 10s timeout: 5s retries: 5 postgres: image: postgres:16 container name: AFFINE-DB restart: on-failure:5 volumes: - /volume1/docker/affine/db:/var/lib/postgresql/data:rw healthcheck: test: ["CMD", "pg isready", "-q", "-d", "affine", "-U", "affine interval: 10s timeout: 5s retries: 5 environment: **POSTGRES USER: affineuser POSTGRES PASSWORD: affinepass POSTGRES DB: affine** PGDATA: /var/lib/postgresql/data/pgdata

Note: Before you paste the code above in the Web editor area below, change the value for **AFFINE_ADMIN_EMAIL** and type in your own email address. You will need this email later at **STEP 23**.

Note: Before you paste the code above in the vvep editor area below, change the value for

AFFINE_ADMIN_PASSWORD and type in your own affine password. You will need this password later at **STEP 24**.



Scroll down on the page until you see a button called **Deploy the stack**. Click on it. Follow the instructions in the image below. The installation process can take up to a few minutes. It will depend on your Internet speed connection.



If everything goes right, you will see this message at the top right of your screen: "**Success Stack successfully deployed**".

• STEP 16

Go back to STEP 1 or you will deal with karma 🙂.

• STEP 17

Now open your browser and type in your HTTPS/SSL certificate like this https://affine.yourname.synology.me In my case it's https://affine.mariushosting.synology.me Click Next. Follow the instructions in the image below. A Warning: the Next button will appear after about one minute. Wait for it to appear.



Click **Next**. Follow the instructions in the image below.

• STEP 19

Click **Next**. Follow the instructions in the image below.



Click Get Started. Follow the instructions in the image below.

• STEP 20

Click Got it!. Follow the instructions in the image below.



On the left sidebar, click **Demo Workspace**. Follow the instructions in the image below.



Click Sign up/ Sign in. Follow the instructions ir DONATE below.



• STEP 23

In the Email area, type in your own email address (AFFINE_ADMIN_EMAIL) that you have previously added at **STEP 13**. Click **Continue with Email**. Follow the instructions in the image below.



In the Password area, type in your own password (**AFFINE_ADMIN_PASSWORD**) that you have previously added at **STEP 13**. Click **Sign in**. Follow the instructions in the image below.





On the left sidebar, click **Settings**. Under **Appearance**, click **Dark** for the dark theme. Follow the instructions in the image below.

• STEP 26

Click on the **Demo Workspace**, then change your **workspace icon** and **name**. **Save** the settings. Follow the instructions in the image below.



Your AFFiNE instance at a glance!

Enjoy Affine!



If you encounter issues by using this container, I DOMATE check out the Common Docker issues article.

Note: If you want to run the Affine container over HTTPS, check my guide on **How to Run Docker Containers Over HTTPS.**

Note: Can I run Docker on my Synology NAS? **See the supported models**.

Note: How to Back Up Docker Containers on your Synology NAS.

Note: Find out **how to update the AFFiNE container** with the latest image.

Note: How to Free Disk Space on Your NAS if You Run Docker.

Note: How to Schedule Start & Stop For Docker Containers.

Note: How to Activate Email Notifications.

Note: How to Add Access Control Profile on Your NAS.

Note: How to Change Docker Containers Restart Policy.

Note: How to Use Docker Containers With VPN.

Note: Convert Docker Run Into Docker Compose.

Note: How to Clean Docker.

Note: How to Clean Docker Automatically.

Note: Best Practices When Using Docker and DDNS.

Note: Some Docker Containers Need WebSocket.

Note: Find out the Best NAS Models For Docker.

Note: Activate Gmail SMTP For Docker Containers.

This post was updated on Friday / March 22nd, 2 DONATE PM



