How to build your own sync system without Google Drive or OneDrive

Using Syncthing has brought many benefits, most notably superior synchronization speed and efficiency for large files and folders, as well as true decentralization and local redundancy.

For years, people have used popular cloud storage services , including Google Drive , OneDrive , and iCloud . All of them are convenient, but they rely on centralized servers. This creates a dependency on centralized infrastructure, and as people start to think more about cost, control, and avoiding vendor lock-in, they know they have to consider other options.

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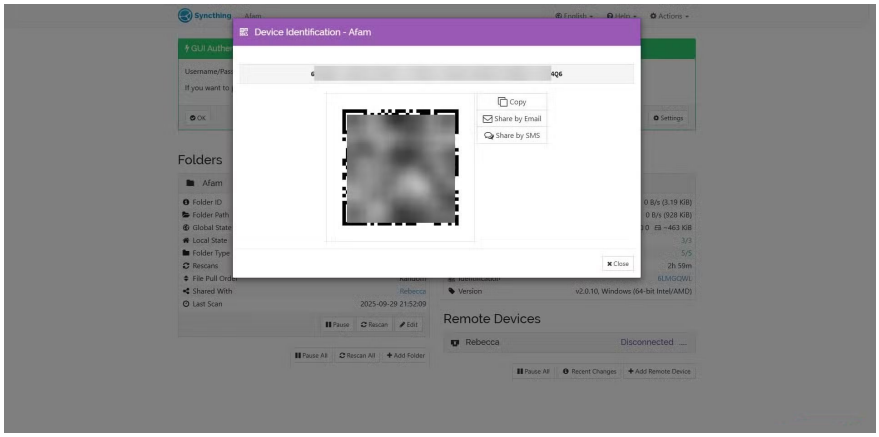
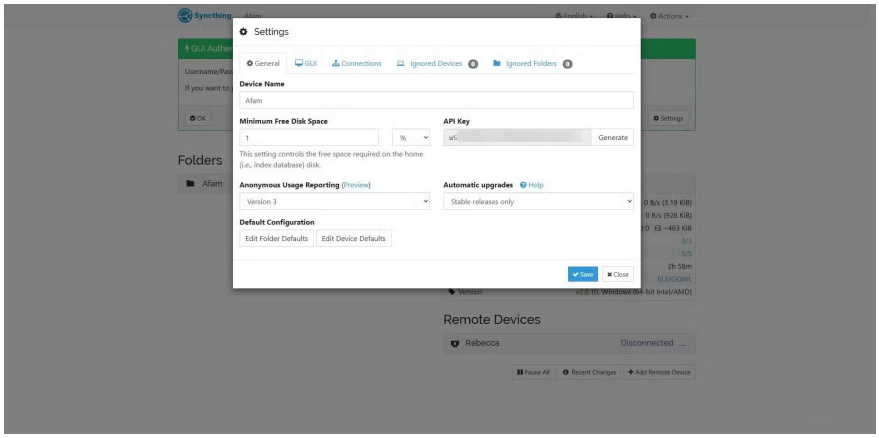
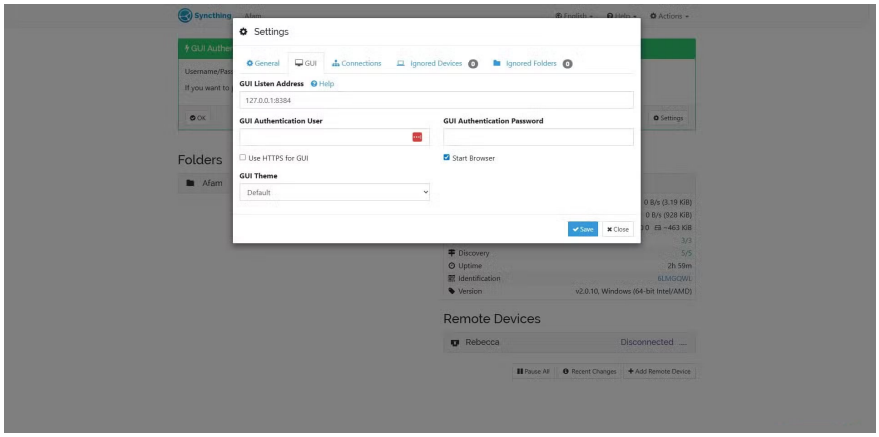
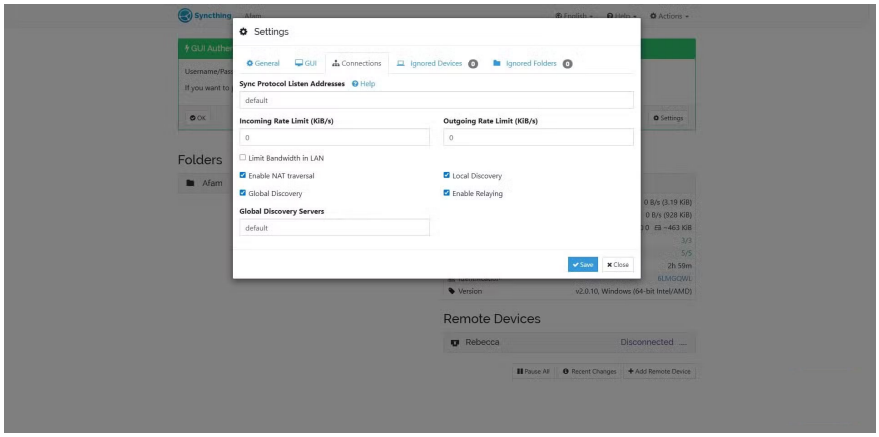
Privacy and control

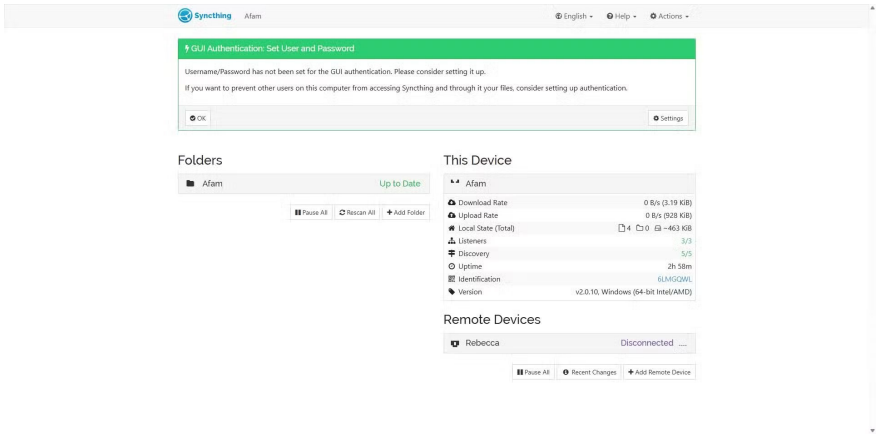
Ditch the popular cloud services!




Settings
General
GUI
Connections
Ignored Devices 0
Ignored Folders 0
Device Name
Afam
Minimum Free Disk Space
1
%
This setting controls the free space required on the home (i.e., index database) disk.
API Key
Generate
Anonymous Usage Reporting (Preview)
Version 3
Automatic upgrades Help
Stable releases only
Default Configuration
Edit Folder Defaults
Edit Device Defaults
Save
Close
Folders
Afam
Remote Devices
Rebecca
Disconnected
Pause All
Recent Changes
Add Remote Device


Settings
General
GUI
Connections
Ignored Devices 0
Ignored Folders 0
GUI Listen Address Help
127.0.0.1:8384
GUI Authentication User
GUI Authentication Password
Use HTTPS for GUI
Start Browser
GUI Theme
Default
Save
Close
Folders
Afam
Discovery
Uptime
Identification
Version
v2.0.10, Windows (64-bit Intel/AMD)
Remote Devices
Rebecca
Disconnected
Pause All
Recent Changes
Add Remote Device


Settings
General
GUI
Connections
Ignored Devices 0
Ignored Folders 0
Sync Protocol Listen Addresses Help
default
Incoming Rate Limit (KiB/s)
0
Outgoing Rate Limit (KiB/s)
0
Limit Bandwidth in LAN
Enable NAT traversal
Local Discovery
Global Discovery
Enable Relaying
Global Discovery Servers
default
Save
Close
Folders
Afam
Remote Devices
Rebecca
Disconnected
Pause All
Recent Changes
Add Remote Device

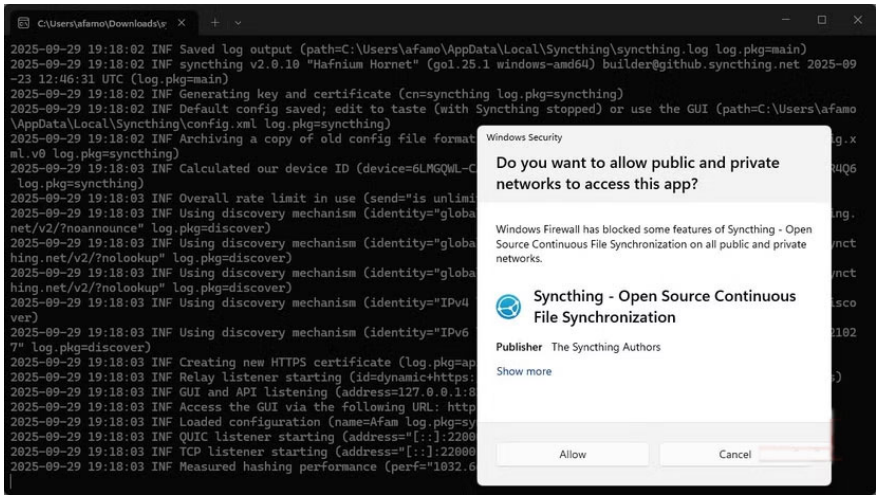

Syncthing
Afam
English
Help
Actions
GUI Authentication: Set User and Password
Username/Password has not been set for the GUI authentication. Please consider setting it up.
If you want to prevent other users on this computer from accessing Syncthing and through it your files, consider setting up authentication.
OK
Settings
Folders
Afam
Up to Date
Pause All
Rescan All
Add Folder
This Device
Afam
Download Rate
0 B/s (3.19 KiB)
Upload Rate
0 B/s (928 KiB)
Local State (Total)
4 0 ~463 KiB
Listeners
3/3
Discovery
5/5
Uptime
2h 58m
Identification
6LMGQWL
Version
v2.0.10, Windows (64-bit Intel/AMD)
Remote Devices
Rebecca
Disconnected
Pause All
Recent Changes
Add Remote Device

Popular cloud options are so convenient, you might not think you need alternatives. However, along with the convenience, there are a few drawbacks that are too serious to ignore. One of them is the risk of a single point of failure. Some cloud storage options run on enterprise-managed data centers. You may encounter temporary access restrictions if the server cluster goes down, as the provider controls the architecture and can restrict access and decide sync speeds.

Privacy is another big issue. While your file contents may be encrypted on the provider's servers, the provider still holds the encryption key and can, in theory, access the data. They also check metadata (timestamps, file sizes, and directory structures) and can scan metadata for indexing, searching, or content analysis purposes. These are beneficial in that they allow the provider to make feature changes to improve the service. However, metadata can reveal patterns, and this may be too big a trade-off for some.

Syncthing is different from other cloud storage services

It is the backbone of a self-hosted synchronous system.



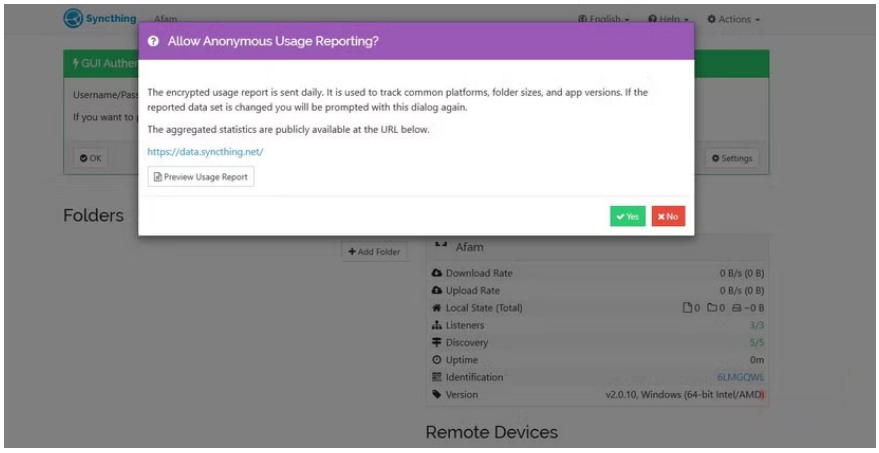
The peer-to-peer architecture is what differentiates Syncthing from cloud storage. While cloud storage pushes files to a central server, Syncthing turns every device you add into a node in the network. Your files move directly between devices and are encrypted in transit for security, with no third-party server storing your actual file data. Each device has a unique cryptographic ID. This ensures that only trusted peers can join the network.

Note : Syncthing does not encrypt files stored on the devices themselves. If you want full endpoint encryption, you need disk-level encryption on your devices.

Once you've set up Syncthing, run the desktop app on two laptops and install the mobile app on one phone. The interface is pretty barebones, but once you add devices by exchanging IDs, you're syncing almost instantly. Drop a 1GB video file into your project folder and it syncs almost instantly; much faster than uploading files to Google Drive over a local network.

Setting Up Syncthing

Seamless multi-device workflow



One of the biggest advantages of using Syncthing is that it works across multiple platforms: Windows, Linux, and there's even a Syncthing Lite for Android . To get started, here's what to do.

1. Download the Syncthing app on all the devices you want to sync. Unzip the files and run the executable. During setup, click **Yes** when prompted to allow public and private access. The app is lightweight and installation is quick.
2. Once installed, Syncthing will launch the local server and open the management page in your browser. You can also access it manually: **http://127.0.0.1:8384**
3. In the Syncthing dashboard, go to **Identification** and copy **the Device ID** . Share this ID with the other device you want to connect to. On that device, click **Add Remote Device** , paste the ID, and name the device. The other device must also approve the connection request to start syncing.
4. On one device, click **Add Folder** . Enter **the Folder Path** (the location of the files you want to sync) and share it with the other device. The receiving device must also approve the folder and assign its own local path. Only then will the sync process begin.

You can always update which folders get synced and choose read-only or read-write mode. But what people like most about Syncthing is that it syncs locally first, so you can sync files without an internet connection , as long as all your devices are connected to the same Wi-Fi network .

Tip : Syncthing's primary goal is to maintain consistency across multiple copies of a file, rather than providing long-term cloud storage or backup services. Platforms like Filecoin, Storj, or Sia are better suited for cloud backup.