

Share USB Hard-drive with Samba using the Luci web-interface

USB-connections are becoming common on most routers today. A popular usage scenario is connecting a USB storage device like a USB-pen or hard-drive and share the content on your LAN. This recipe will guide you through how this can easily be set-up using the Luci web-interface.

Install dependencies

You will find detailed walk troughs for USB-storage and Samba respectively. As a minimum you will need to install the packages `kmod-usb-storage`, `block-mount`, `samba36-server` and `luci-app-samba`. In addition you will need support for the file system you format the USB device with. For ext file-systems install `kmod-fs-ext4`, for btrfs install `kmod-fs-btrfs`. Avoid using ntfs from Microsoft, it lacks a couple of important features for file-systems. But if you still want to use it, install `ntfs-3g` in order to have read & write access.

Mount your USB drive

Whether it is a USB pen or a hard-drive. Simply plug it in the USB port, and it should show be automatically detected by OpenWrt (if you ssh into the router you will typically find a new entry `/dev/sda` for the device, and `/dev/sda1` for it's first partition). Now go to the **Mount points** tab under System in the Luci web-interface. You will find your USB storage device listed already as show below. If you have formatted your drive with the Ext file system, all you need is to tick **Enable** and then **Save & Apply**. ⚠ Mount points is only visible if dependencies are already installed

OpenWrt | OpenWrt Barrier Breaker r35890 | Load: 0.14 0.11 0.05 Changes: 0

Status **System** Services Network Logout

System Administration Software Startup Scheduled Tasks Time Synchronisation **Mount Points** LED Configuration

Backup / Flash Firmware Custom Commands Reboot

Mount Points

Mounted file systems

Filesystem	Mount Point	Available	Used
rootfs	/	1.84 MB / 2.06 MB	11% (232.00 KB)
/dev/root	/rom	0.00 B / 5.00 MB	100% (5.00 MB)
tmpfs	/tmp	61.03 MB / 61.81 MB	1% (796.00 KB)
tmpfs	/dev	512.00 KB / 512.00 KB	0% (0.00 B)
/dev/mtdblock3	/overlay	1.84 MB / 2.06 MB	11% (232.00 KB)
overlayfs:/overlay	/	1.84 MB / 2.06 MB	11% (232.00 KB)

Mount Points

Mount Points define at which point a memory device will be attached to the filesystem

Enabled	Device	Mount Point	Filesystem	Options	Root	Check	
<input checked="" type="checkbox"/>	/dev/sda1 (476937 MB)	/home	ext4	rw, sync	no	no	Edit Delete

[Add](#)

SWAP

If your physical memory is insufficient unused data can be temporarily swapped to a swap-device resulting in a higher amount of usable RAM. Be aware that swapping data is a very slow process as the swap-device cannot be accessed with the high datarates of the RAM.

Enabled	Device	
<input type="checkbox"/>	/dev/sda2	Edit Delete

[Add](#)

[Reset](#) [Save](#) [Save & Apply](#)

In my case I used the btrfs filesystem due to it's advanced functionalities. In this case you will need to change the file system. Choose **Edit**, and you will be able to revise like this:

OpenWrt | OpenWrt Barrier Breaker r35890 | Load: 0.13 0.13 0.06 Changes: 0

Status **System** Services Network Logout

System Administration Software Startup Scheduled Tasks Time Synchronisation **Mount Points** LED Configuration

Backup / Flash Firmware Custom Commands Reboot

Mount Points - Mount Entry

Mount Entry

General settings

Advanced Settings

Enable this mount

☐

Device

/dev/sda1 (476937 MB)

The device file of the memory or partition (e.g. /dev/sda1)

Mount point

/home

Specifies the directory the device is attached to

Filesystem

btrfs

The filesystem that was used to format the memory (e.g. ext3)

Run filesystem check

☐

Run a filesystem check before mounting the device

Back to Overview

Reset

Save

Save & Apply

Share the drive on your local network

We will only show how to do simply sharing here. Samba supports advanced access policies, but this recipe is meant for the most common use case. Please consult the [Samba howto](#) for a more thorough walk-through.

Open the web-interface Luci, under **Services** choose the **Network Shares** tab. Here you will need to fill in the name of your shared folder as it will appear on you network. In our example we called it *Share*. You will also need to fill in the mount point from above, we used the default */home*. You will also need to tick **Allow guests** (otherwise setting up user access control is necessary). Also tick Read-Only is you only want to grant read access for clients on you local network, we allowed write access here:

OpenWrt | OpenWrt Barrier Breaker r35890 | Load: 0.00 0.07 0.05 Unsaved Changes: 3

Status System **Services** Network Logout

Dynamic DNS hd-idle p910nd - Printer server **Network Shares**

Network Shares


Samba

General settings Edit template




Hostname OpenWrt

Description OpenWrt

Workgroup WORKGROUP

Share home-directories 1
 Allow system users to reach their home directories via network shares

Shared Directories

Name	Path 	Allowed users	Read-only	Allow guests	Create mask <small>Mask for new files</small>	Directory mask <small>Mask for new directories</small>	
Share	/home		<input type="checkbox"/>	<input checked="" type="checkbox"/>			 Delete
 Add							

Reset Save Save & Apply

doc/recipes/usb-storage-samba-webinterface.txt · Last modified: 2015/01/30 15:42 by andreas85