Template:Networking device manual sd card

This chapter provides a description on how to correctly **insert a SD card** into a {{{name}}} device.

The information in this page is updated in accordance with firmware version .

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Contents

Compatibility

Before installation, make sure your SD card is compatible with {{{name}}} devices:

1. Maximum supported (tested) SD card capacity is **64GB**.
2. Supported (tested) formats are: **FAT32**, **NTFS**, **ext2**, **ext3**, **ext4**.
3. SD cards with a fixed **1.8V** voltage are not supported. Make sure your memory card supports **3.3V** by referring to manufacturer's documentation.
4. The device is compatible only with **microSD** size memory cards.

Installation

Make sure device is powered off before inserting SD card!

SD card insertion

1 {{{1}}}
2 {{{2}}}

Results

Once device is booted up with an SD card installed, you can confirm it is recognized by navigating to

[[{{{name}}}_USB_Tools#Mounted_File_Systems | USB Tools]] WebUI page. Under **Mounted File Systems** the SD card should be visible:

You may now use various functionality found in **[[{{{name}}}_USB_Tools | USB Tools]]** with the SD card instead of a USB device.

If you are having trouble with the device recognizing your SD card, please refer to the **Troubleshooting** section below.

Troubleshooting

1. Double check the SD card is **[[{{{name}}}_SD_Card#Compatibility | compatible]]** with {{{name}}} devices.
2. Make sure the SD card is not corrupted. We recommend formatting it before first installation.

Formatting SD card using device

If you are unable to format the memory card using other means, it is possible to do it directly on {{{name}}} device.

Pre-requisites

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1. Device must have WAN access.
2. SD card must be recognized by the filesystem.

Procedure

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1. Connect to device's **[[{{{name}}}_CLI | CLI]]**.
2. Use command `ls /dev/ | grep mmc` to display recognized memory cards:
   ```
   root@Teltonika-{{{name}}}:~# ls /dev/ | grep mmc
   mmcblk0
   mmcblk0p1 ← SD card
   ```
3. Once confirmed the SD is recognized, we may start the formatting procedure:
4. Run commands `opkg update` and `opkg install e2fsprogs` to download required tools.
5. Unmount the SD card with command `umount /dev/mmcblk0p1`
6. Start formatting with command `mkfs.ext`**`X`**` /dev/mmcblk0p1` where X is either 2 (for ext2 format), 3 (for ext3 format) or 4 (for ext4 format).
7. A successful format procedure should look like this:
   ```
   root@Teltonika-RUT955:~# mkfs.ext2 /dev/mmcblk0p1
   mke2fs 1.45.6 (20-Mar-2020)
   /dev/mmcblk0p1 contains a ntfs file system labelled '64gb'
   Proceed anyway? (y,N) y
   Creating filesystem with 15132670 4k blocks and 3784704 inodes
   Filesystem UUID: 6053673b-d6b0-420d-84da-0669b71a5211
   ```

```
Superblock backups stored on blocks:
32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632, 2654208,
4096000, 7962624, 11239424

Allocating group tables: done
Writing inode tables: done
Writing superblocks and filesystem accounting information: done
```

8. Reboot the {{{name}}} device and refer to **[[{{{name}}}_SD_Card#Results | Results]]** section

Note: The *Writing inode tables* section might take a long time depending on the size of your SD card (10+ minutes with 64GB SD).

[[Category:{{{name}}} Manual]]