

# Template:Networking rut manual storage memory expansion

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

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## Contents

- [1 Summary](#)
- [2 Prerequisites](#)
- [3 Memory expansion](#)

## Summary

The **Memory expansion** function provides the possibility to expand the device's flash memory with a USB mass storage device.

This chapter of the user manual provides an overview of the Storage Memory Expansion page for {{{name}}} devices.

## Prerequisites

To be eligible for router memory expansion, the USBMSD must qualify the following imposed restrictions:

- The USB must be the first one inserted. (For example, if you are using a USB hub, the eligible device is the first USBMSD attached to the hub.)
- The first partition of the USBMSD must be the primary partition.
- The size of the first primary partition must be at least 512 MB.
- The filesystem of the first primary partition must be ext2.

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Take serious notice of the warnings displayed in the Memory expansion page. Here's what you need to know **before enabling memory expansion**:

- Memory expansion procedure will reboot the router.
- When reversing the memory expansion procedure, the router will be reverted to the state it was before the procedure. Make sure to fully configure the router before the procedure.
- The procedure will erase all existing files from the USBMSD.
- Samba shared directories on /mnt/sda1 will be deleted.

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Here's what you need to know **before disabling memory expansion**:

- Disabling memory expansion will reboot the router.
- Disabling memory expansion will revert the router to the state it was before the memory expansion. This may leave router unconfigured if it was so before the expansion.
- Do not unplug the USBMSD before disabling memory expansion.

## Memory expansion

It is highly recommended that you read the [Prerequisites](#) section or read the notes and warnings displayed in the WebUI page before enabling memory expansion.

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If you insert a drive of a wrong format (not ext2), you will see a warning message like this:



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If there is no drive inserted or there is another problem with the drive, you will see a warning message like this:



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If everything is correct, simply enable memory expansion. save changes and wait for the router to reboot.



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You can later check the router's memory state with the Linux *df* command or via the System widget in the Status → [\[\[{{{name}}} Overview|Overview\]\]](#) page:



[\[\[Category:{{{name}}} System section\]\]](#)