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# RouterOS v4 released

The new RouterOS version is available on the download page. Please remember some important basics before upgrading:

- 1. Update the Bootloader if using a RouterBOARD
- 2. If already running RouterOS v3.25 or newer, Update your RouterOS license
- 3. If you will use Netinstall for installation, make sure you have the latest version of Netinstall

If you are currently running an **older** version of RouterOS, where license can't be upgraded to the new format, you can still upgrade, but absolutely make sure that:

\* After successful upgrade click on the "Update License" button in Winbox and make sure the new license is accepted. You will have 72 hours to do this, but it's recommended to do this immediatelly

http://www.mikrotik.com/download.html

### RouterBOARD switch chips

New RouterOS v4 also includes new RouterBOARD switch functionality, Port Switching, Port Mirroring and others. To see which of these features your device supports, and how to configure them, see this new article in our wiki documentation:

#### http://wiki.mikrotik.com/wiki/Switch\_Chip\_ Features

### RB750 branding offer

MikroTik now offers you the new low cost RB750 routers preinstalled with v4 RouterOS, and what's even more exciting - with your own branding. You can now order them without the front sticker labels, to order the stickers locally, or, if you order more than 1000 units, you can provide us with new design, and we will make the boxes with your branded stickers.

Contact sales@mikrotik.com for more info.



## 802.11n support

Full MIMO 802.11n wireless support is included with RouterOS v4 full release. High speed wireless links are now possible, with almost 200Mbit throughput on real tests by our customers.

RouterOS supports among others also the new RouterBOARD R series wireless 802.11n cards:

- RouterBOARD R52N
- RouterBOARD R2N

More information about them in our RouterBOARD. com pricelist:

#### http://www.routerboard.com



The perfect device to enjoy full speed of 802.11n wireless is the RouterBOARD 600A, which is currently the only RouterBOARD with miniPCI slots and Gigabit ports.





### RouterBOARD 750

The RB750 is the brand new low cost SOHO router by MikroTik. It has five ethernet ports, a nice plastic case, a power supply - all together for only of \$39.95!

Not only is this an attractive looking tiny SOHO unit, it's price is lower than the RouterOS license alone - there simply is no choice when it comes to managing your wired home network, the RB750 has it all.

Not only it's affordable, small, good looking and easy to use - It's probably the most affordable MPLS capable router on the market. No more compromise between price and features - RB750 has both.

With it's compact design and clean looks, it will fit perfectly into any SOHO environment.



RB750 packets per second performance

| Firewall | Conntrack | Mode        | 64 bytes | 512 bytes | 1500 bytes |
|----------|-----------|-------------|----------|-----------|------------|
| N/A      | Off       | Routing     | 64000    | 45445     | 16250      |
| N/A      | On        | Routing     | 47300    | 45445     | 16250      |
| Off      | Off       | Rstp-bridge | 91000    | 45445     | 16250      |
| On       | Off       | Rstp-bridge | 56400    | 45445     | 16250      |
| On       | On        | Rstp-bridge | 41600    | 39500     | 16250      |

### RouterOS License changes

As the RouterOS version is now v4, the license has also changed, the Level3 and Level4 licenses now allow RouterOS upgrades up to last version of v5, and Level5 and Level6 licenses allow RouterOS upgrades up to last update of RouterOS v6.

This is outlined in our License wiki manual:

http://wiki.mikrotik.com/wiki/All\_about\_licenses

### New feature: KVM virtualization

The new version introduces a new Virtualization mechanism, next to the existing Xen and MetaRouter - the Kernel-based Virtual Machine (KVM).

KVM works much faster than Xen, and it directly supports the hardware virtualization features of Intel and AMD processors. For Intel it's called VT-x and for AMD it's called AMD-V.

If you have a X86 machine with a CPU that supports one of these technologies, you can use KVM for higher performance, better reliability and other benefits. For example, our new implementation of KVM has a newer kernel, which means more hardware support, and easier development for MikroTik to include new features. We have planned many new exciting Virtualization features in upcoming RouterOS versions.

Read more about X86 Hardware virtualization and which processors are supported: http://en.wikipedia.org/wiki/X86\_virtualization

And about RouterOS virtualization systems: http://wiki.mikrotik.com/wiki/Virtualization

### MPLS and BGP new versions

Also new in this release are MPLS and BGP, which have gone out of the testing phase, and are ready for mass deployment.

MPLS stands for Multi Protocol Label Switching. It can be used to replace IP routing - packet forwarding decision is no longer based on fields in IP header and routing table, but on labels that are attached to packet. This approach speeds up forwarding process because next hop lookup becomes very simple compared to routing lookup.

BGP is also all new, it has many new features, it is much faster, and much more reliable.

About new MPLS: http://wiki.mikrotik.com/wiki/MPLS

About new BGP: http://wiki.mikrotik.com/wiki/BGP