

# Manual:License

## Overview

RouterBOARD devices come preinstalled with a RouterOS license, if you have purchased a RouterBOARD device, nothing must be done regarding the license.

For X86 systems (ie. PC devices), you need to obtain a license key.

The license key is a block of symbols that needs to be copied from your mikrotik.com account, or from the email you received in, and then it can be pasted into the router. You can paste the key anywhere in the terminal, or by clicking "Paste key" in Winbox License menu. A reboot is required for the key to take effect.

RouterOS licensing scheme is based on SoftwareID number that is bound to storage media (HDD, NAND).

Licensing information can be read from CLI system console:

```
[admin@RB1100] > /system license print
software-id: "43NU-NLT9"
upgradable-to: v7.x
nlevel: 6
features:
[admin@RB1100] >
```

or from equivalent winbox, webfig menu.

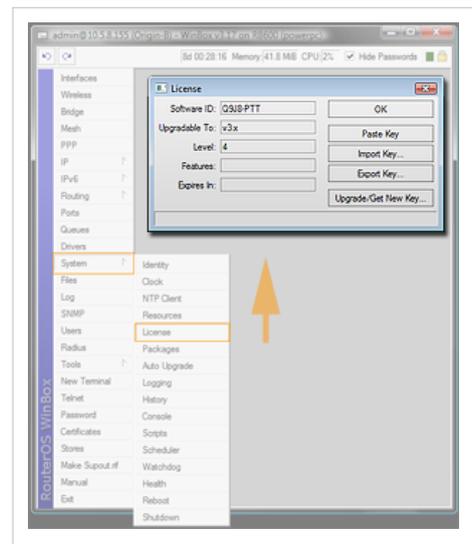
## License Levels

You can purchase a Level 3, 4, 5 and 6. Level 1 is the demo license. The difference between license levels is shown in the table.

Level 3 is a wireless station (client) only license. Level 3 can only be obtained in large quantities.

Level 2 was a transitional license from old legacy (pre 2.8) license format. These licenses are not available anymore, if you have this kind of license, it will work, but to upgrade it - you will have to purchase a new license.

Note: current RouterOS version is 6 table modified according to that. The Upgradable-to below applies only to Keys purchased after release of v6



| Level number                 | 0 (Demo mode)         | 1 (Free)                             | 3 (WISP CPE)               | 4 (WISP)  | 5 (WISP)  | 6 (Controller) |
|------------------------------|-----------------------|--------------------------------------|----------------------------|-----------|-----------|----------------|
| Price                        | no key <sup>[1]</sup> | registration required <sup>[1]</sup> | volume only <sup>[2]</sup> | \$45      | \$95      | \$250          |
| Upgradable To                | -                     | no upgrades                          | ROS v7.x                   | ROS v7.x  | ROS v8.x  | ROS v8.x       |
| Initial Config Support       | -                     | -                                    | -                          | 15 days   | 30 days   | 30 days        |
| Wireless AP                  | 24h trial             | -                                    | -                          | yes       | yes       | yes            |
| Wireless Client and Bridge   | 24h trial             | -                                    | yes                        | yes       | yes       | yes            |
| RIP, OSPF, BGP protocols     | 24h trial             | -                                    | yes(*)                     | yes       | yes       | yes            |
| EoIP tunnels                 | 24h trial             | 1                                    | unlimited                  | unlimited | unlimited | unlimited      |
| PPPoE tunnels                | 24h trial             | 1                                    | 200                        | 200       | 500       | unlimited      |
| PPTP tunnels                 | 24h trial             | 1                                    | 200                        | 200       | 500       | unlimited      |
| L2TP tunnels                 | 24h trial             | 1                                    | 200                        | 200       | 500       | unlimited      |
| OVPN tunnels                 | 24h trial             | 1                                    | 200                        | 200       | unlimited | unlimited      |
| VLAN interfaces              | 24h trial             | 1                                    | unlimited                  | unlimited | unlimited | unlimited      |
| HotSpot active users         | 24h trial             | 1                                    | 1                          | 200       | 500       | unlimited      |
| RADIUS client                | 24h trial             | -                                    | yes                        | yes       | yes       | yes            |
| Queues                       | 24h trial             | 1                                    | unlimited                  | unlimited | unlimited | unlimited      |
| Web proxy                    | 24h trial             | -                                    | yes                        | yes       | yes       | yes            |
| User manager active sessions | 24h trial             | 1                                    | 10                         | 20        | 50        | Unlimited      |
| Number of KVM guests         | none                  | 1                                    | Unlimited                  | Unlimited | Unlimited | Unlimited      |

(\*) - BGP is included in License Level3 only for RouterBOARDS, for other devices you need Level4 or above to have BGP.

All Licenses:

- never expire
- include 15-30 day free support over e-mail
- can use unlimited number of interfaces
- are for one installation each
- Level3 is not available for purchase individually. For ordering more than 100 L3 licenses, contact sales[at]mikrotik.com

## Licenses and RouterOS upgrades

RouterOS upgrade capabilities are not limited by time, but by version, and this depends on the RouterOS license level. For example if you are running RouterOS v5, your license could restrict the upgrade only to v6, and not to v7. The following examples describe how this is determined:

- There are two types of keys, Level3/L4 and Level5/L6
- The difference between these is that L3 and L4 only allow RouterOS upgrades until the last update of the next version. L5 and L6 however, give you the ability to use one more major version
- There are also differences between all License levels (L3-L6) that are unrelated to RouterOS upgrades, see License levels

So the math is:

- $L3/4 = \text{current version} + 1 = \text{can use}$

- L5/6 = current version + 2 = can use

eg. L5/6 = v3 + 2 = v5.21 you can use

Examples:

- If current version is ROS v3, L3 and L4 will work with v3.1, v3.20, v4.1, v4.20 but NOT v5.0 and beyond
- If current version is ROS v3, L5 and L6 will work with v3.1, v3.20, v4.1, v4.20 and also v5beta1 but NOT v6.0 and beyond
- If current version would be **ROS v4**, L5 and L6 will work with v4.1, v4.20, v5.1, v5.20 and also v6beta to v6.99 but NOT v7

## New 8 symbol SoftID

Since RouterOS 3.25 and 4.0beta3 **new SoftID format** is introduced. Your license menu will show both the old and the new SoftID. Even by upgrading to a new version, RouterOS will **still work as before**, but to use some of the new features, LICENSE UPDATE will be necessary. To do this, just click on "Update license key" button in Winbox (currently only in Winbox).

New SoftID's are in the form of XXXX-XXXX (Four symbols, dash, four symbols).

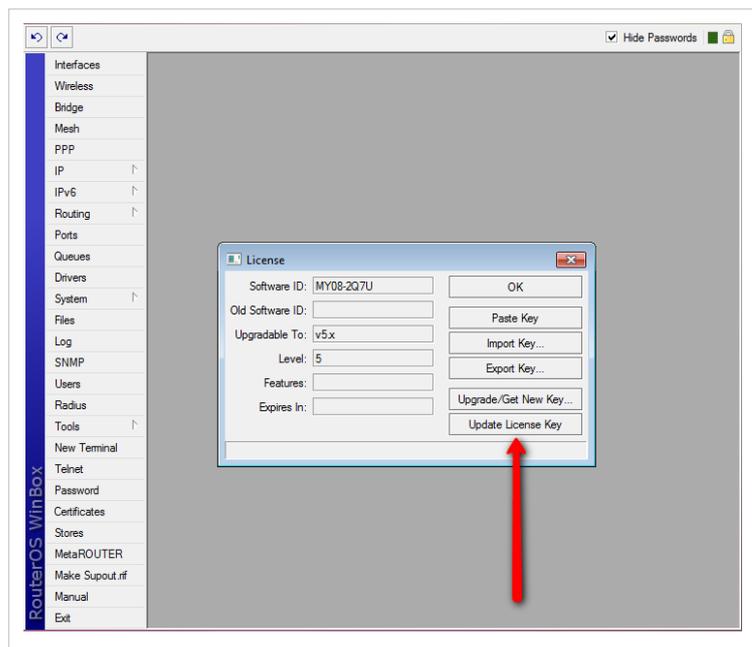
**The following actions will be taken:**

1. Winbox will contact [www.mikrotik.com](http://www.mikrotik.com) with your old SoftID
2. [www.mikrotik.com](http://www.mikrotik.com) will check the database and see details about your key
3. the server will generate a new key as "upgrade" and put it into the same account as old one
4. Winbox will receive the new key and automatically License your router with the new key
5. Reboot will be required
6. New RouterOS features will be unlocked

*Important Note!*: If you see this button also in v3.24, don't use it, it will not work.

If you ever wish to downgrade RouterOS, you will have to apply the OLD key before doing so. When RouterOS applies the NEW key, the OLD key is saved to a file, in the FILES folder, to make sure you have the old key handy.

**Even more important:** Don't downgrade v4.0b3 to v3.23 or older. Use only v3.24 for downgrading, or you might lose your new format key.



## Change license Level

1. There are no license level upgrades, if you wish to use a different license Level, please purchase the appropriate level. Be very careful when purchasing for the first time, choose the correct option.
2. Why is it not possible to change license level (ie. upgrade license)? Just like you can't easily upgrade your car's engine from 2L to 4L just by paying the difference, you can't switch license levels as easily. This is a policy used by many software companies, choose wisely when making your purchase! Instead we have lowered the prices, and removed the software update time limit.

## Using the License

### Can I Format or Re-Flash the drive?

Formatting, and Re-Imaging the drive with non-mikrotik tools (like DD and Fdisk) will destroy your license! Be very careful and contact mikrotik support before doing this. It is not recommended, as mikrotik support might deny your request for a replacement license. For this use MikroTik provided tools Netinstall or CD-install that are freely available from our download page.

### How many computers can I use the License on?

At the same time, the RouterOS license can be used only in one system. The License is bound to the HDD it is installed on, but you have the ability to move the HDD to another computer system. You cannot move the License to another HDD, neither can you format or overwrite the HDD with the RouterOS license. It will be erased from the drive, and you will have to get a new one. If you accidentally removed your license, contact the support team for help.

### Can I temporary use the HDD for something else, other than RouterOS?

As stated above, no.

### Can I move the license to another HDD ?

If your current HDD drive is destroyed, or can no longer be used, it is possible to transfer the license to another HDD. You will have to request a replacement key (see below) which will cost 10\$

### What is a Replacement Key

It is a special key which is issued by the Support Team if you accidentally lose the license, and the Mikrotik Support decides that it is not directly your fault. It costs 10\$ and has the same features as the key that you lose. Note that before issuing such key, the Mikrotik Support can ask you to prove that the old drive is failed, in some cases this means sending us the dead drive.

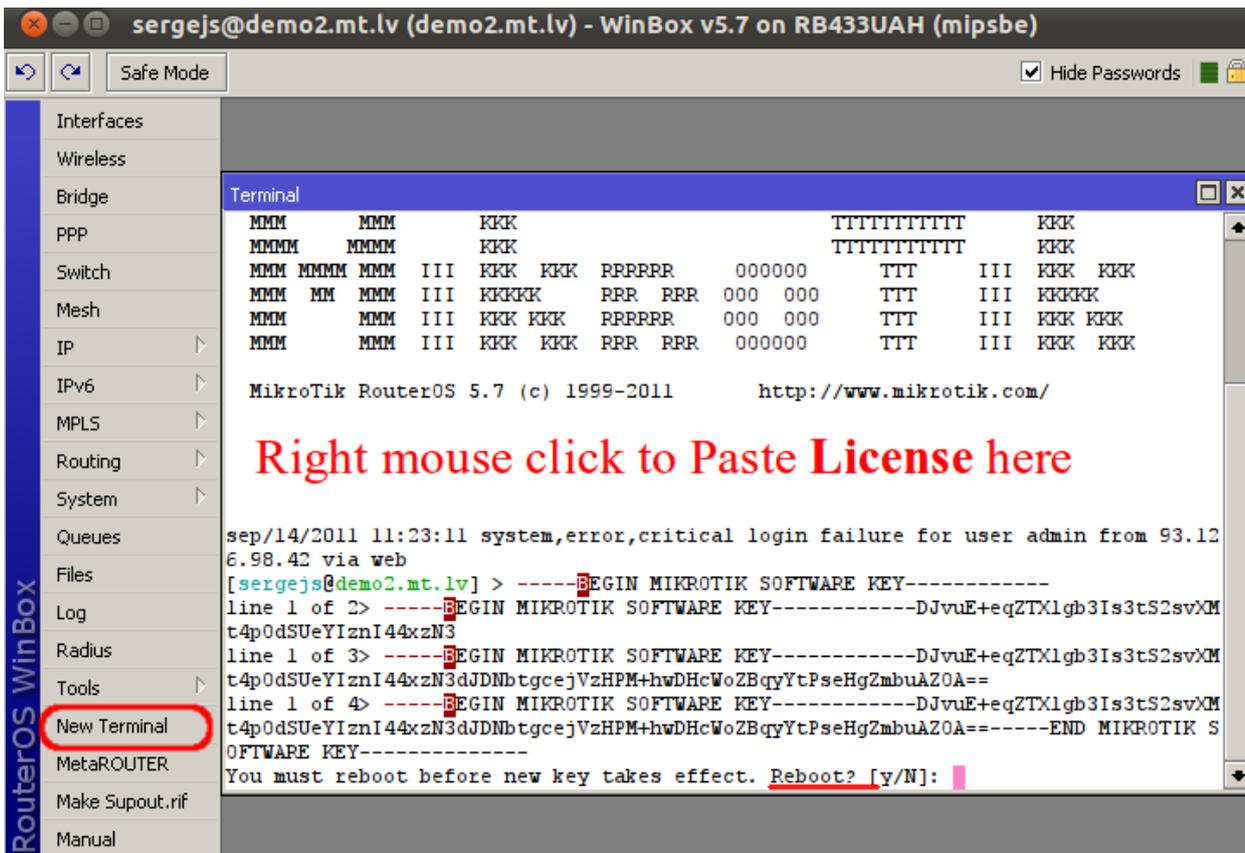


**Note:** We may issue only one replacement key per one original key, using replacement key procedure twice for one key will not be possible. In cases like this new key for this RouterOS device must be purchased.

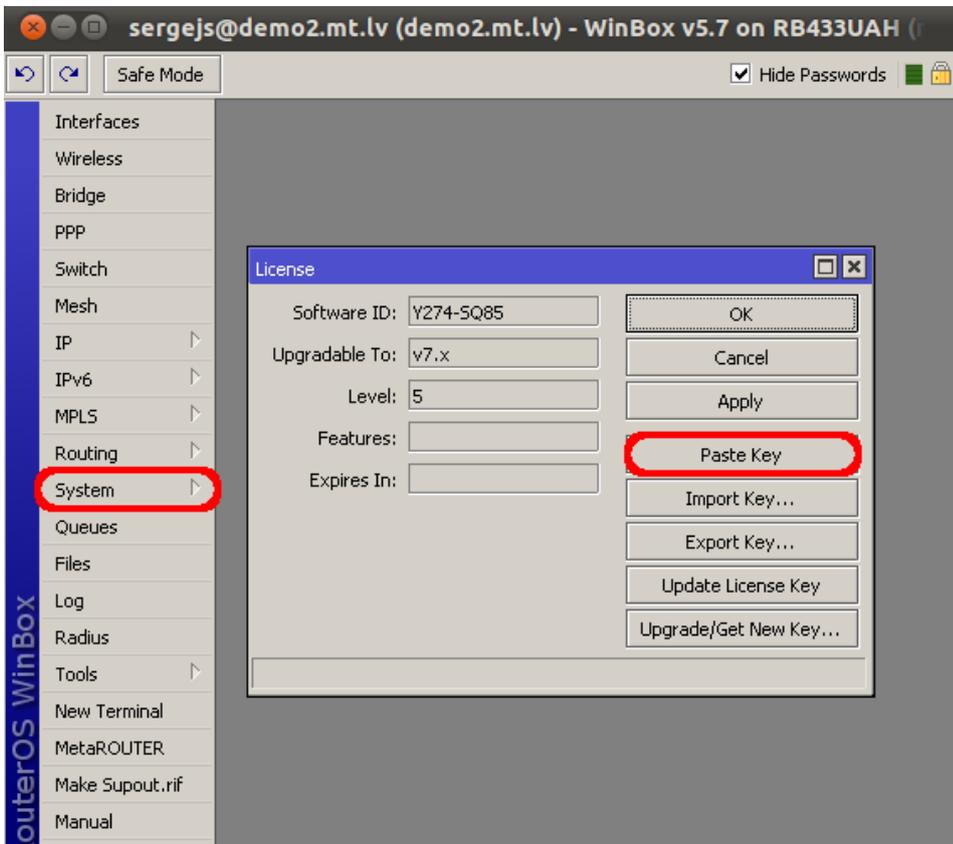
### Must I type the whole key into the router?

No, simply copy it and paste into the Telnet window, or License menu in Winbox.

Copy license to Telnet Window (or Winbox New Terminal),



Another option to use Winbox License Window, click on **System** ---> **License**,



**Can I install another OS on my drive and then install RouterOS again later?**

No, because if you use formatting or partitioning utilities, or tools that do something to the MBR, you will lose the license and you will have to make a new one. This process is not free (see Replacement Key above)

**I lost my RouterBOARD, can you give me the license to use on another system?**

The RouterBOARD comes with an embedded license. You cannot move this license to a new system in any way, this includes upgrades applied to the RouterBOARD while it was still working.

**Licenses Purchased from Resellers**

The keys that you purchase from other vendors and resellers, are not in your account. Your mikrotik.com account only contains licenses purchased from MikroTik directly. However, you can use the "Request key" link in your account, to get the key into your account for reference, or for some upgrades (if available).

**Obtaining Licenses and working with them****Where can I buy a RouterOS license key?**

In the Account Server, which is located on [www.mikrotik.com](http://www.mikrotik.com)

**If I have purchased my key elsewhere**

You must contact the company who sold you the license, they will provide support

**If I have a license and want to put it on another account?**

You can give access to keys with the help of Virtual Folders

**References**

[1] <http://www.mikrotik.com/download.html>

[2] <mailto:sales@mikrotik.com>

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