

# RouterOS license keys

## Overview

MikroTik hardware routers that run RouterOS come preinstalled with a RouterOS license, if you have purchased a RouterOS based device, nothing must be done regarding the license.

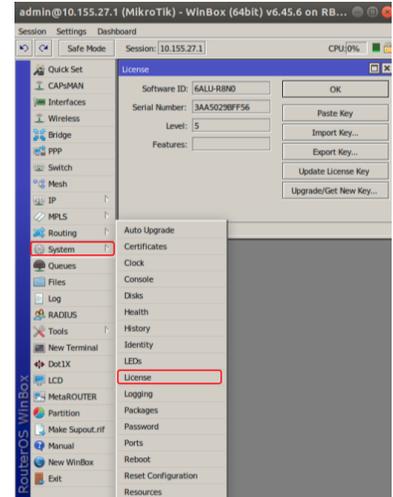
For X86 systems (i.e. PC devices), you need to obtain a license key.

The license key is a block of symbols that needs to be copied from your [mikrotik.com](https://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 Software-ID / System-ID where:

- RouterBOARD software-id is bound to storage media (HDD, NAND).
- x86 software-id is bound to MBR
- CHR system-id is bound to MBR and UUID



Licensing information can be read from CLI system console:

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

or from equivalent [WinBox](#), [WebFig](#) menu.

## License Levels

After installation RouterOS runs in **trial mode**. You have 24 hours to register for Level1 (Free demo) or purchase a Level 4,5 or 6 license and paste a valid key.

Level 3 is a wireless station (client or CPE) only license. *For x86 PCs, Level3 is not available for purchase individually.*

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

The difference between license levels is shown in the table below.

Level number	0 (Trial mode)	1 (Free Demo)	3 (WISP CPE)	4 (WISP)	5 (WISP)	6 (Controller)
Price	no key	registration required	not for sale	\$45	\$95	\$250
Wireless AP mode (PtM)	24h trial	-	no	yes	yes	yes
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
EoIP tunnels	24h trial	1	unlimited	unlimited	unlimited	unlimited
VLAN interfaces	24h trial	1	unlimited	unlimited	unlimited	unlimited
Queue rules	24h trial	1	unlimited	unlimited	unlimited	unlimited
HotSpot active users	24h trial	1	1	200	500	unlimited

<b>User manager active sessions</b>	24h trial	1	10	20	50	Unlimited
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All Licenses:

- never expire (a running and licensed router can be used indefinitely)
- can use unlimited number of interfaces
- are for one installation each
- offer unlimited software upgrades

## CHR License Levels

License levels described until now do not apply to Cloud Hosted Routers (CHRs). CHR is a RouterOS version intended for running as a virtual machine. It has its own 4 license levels as well as trial where you can test any of the paid license levels for 60 days.

60-day free trial license is available for all paid license levels. To get the free trial license, you have to have an account on [MikroTik.com](https://mikrotik.com) as all license management is done there.

Perpetual is a lifetime license (buy once, use forever). It is possible to transfer a perpetual license to another CHR instance. A running CHR instance will indicate the time when it has to access the account server to renew its license. If the CHR instance will not be able to renew the license it will behave as if the trial period has ran out and will not allow an upgrade of RouterOS to a newer version.

After licensing a running trial system, you **must** manually run the `/system license renew` command from the CHR to make it active. Otherwise the system will not know you have licensed it in your account. If you do not do this before the system deadline time, the trial will end and you will have to do a complete fresh CHR installation, request a new trial and then license it with the license you had obtained.

License	Speed limit	Price	Description
Free	1Mbit	FREE	The free license level allows CHR to run indefinitely. It is limited to 1Mbps upload per interface. All the rest of the features provided by CHR are available without restrictions. To use this, all you have to do is download disk image file from our download page and create a virtual guest.
P1	1Gbit	\$45	P1 (perpetual-1) license level allows CHR to run indefinitely. It is limited to 1Gbps upload per interface. All the rest of the features provided by CHR are available without restrictions. It is possible to upgrade p1 to p10 or p-unlimited After the upgrade is purchased the former license will become available for later use on your account.
P10	10Gbit	\$95	P10 (perpetual-10) license level allows CHR to run indefinitely. It is limited to 10Gbps upload per interface. All the rest of the features provided by CHR are available without restrictions. It is possible to upgrade p10 to p-unlimited After the upgrade is purchased the former license will become available for later use on your account.
P- Unlimited	Unlimited	\$250	The p-unlimited (perpetual-unlimited) license level allows CHR to run indefinitely. It is the highest tier license and it has no enforced limitations.
60-day Trial		FREE	<p>In addition to the limited Free installation, you can also test the increased speed of P1/P10/PU licenses with a 60 trial.</p> <p>You will have to have an account registered on <a href="https://mikrotik.com">MikroTik.com</a>. Then you can request the desired license level for trial from your router that will assign your router ID to your account and enable a purchase of the license from your account. All the paid license equivalents are available for trial. A trial period is 60 days from the day of acquisition, after this time passes, your license menu will start to show "Limited upgrades", which means that RouterOS can no longer be upgraded.</p> <p><b>Note</b> that if you plan to purchase the selected license, you must do it <b>before</b> 60 days trial ends. If your trial has ended, and there are no purchases within 2 months, the device will no longer appear in your MikroTik account. You will have to make a new CHR installation to make a purchase within the required time frame.</p> <p>To request a trial license, you must run the command <code>"/system license renew"</code> from the CHR device command line. You will be asked for the username and password of your <a href="https://mikrotik.com">mikrotik.com</a> account.</p>



**Warning:** If you plan to use multiple virtual systems of the same kind, it may be possible that the next machine has the same SystemID as the original one. This can happen on certain cloud providers, such as Linode. To avoid this, after your first boot, run the command `"/system license generate-new-id"` before you request a trial license. Note that this feature must be used only while CHR is running on free type of RouterOS license. If you have already obtained paid or trial license, do not use regenerate feature since you will not be able to update your current key any more

To use multiple virtual machines, download the disk image from our webpage, and make as many copies, as you need virtual machines. Then make new virtual machine system from each virtual disk image.

Make sure to make copies of the Disk Image before you run or register the downloaded file.

## Replacement Key

It is a special key which is issued by the MikroTik support team if you accidentally lose the license on a x86 instance running RouterOS, and the MikroTik Support employee decides that it is not directly your fault. It costs 10\$ and has the same features as the key that you lost.

Note that before issuing such key, MikroTik Support can ask you to prove that the old drive has failed, in some cases, this means sending us the dead drive.

### Replacement key request

1) Go to your account management in [mikrotik.com](https://mikrotik.com) and fill the "support contact form" or write a direct e-mail to [support@mikrotik.com](mailto:support@mikrotik.com)

- Please provide detailed information about why replacement key is required

2) Send required info to MikroTik support department.

3) Re-check your account after support staff has confirmed that replacement key has been added to your account. Select the section "Make a key from replacement key"

#### ROUTEROS KEYS

[Search and view all keys](#)

[Make a key from replacement key \(5\)](#)

[Request key from another account](#)

[Transfer prepaid keys \(11\)](#)

[Make a demo key](#)

[Make a key from prepaid key \(11\)](#)

4) Select the appropriate license level on which you wish to perform the replacement

5) Enter the new "software-ID"

6) Proceed to checkout by pressing "Add license replacement to cart" and finish the payment

# Replace software license

You have requested to replace your actual software licenses with new ones. Our support has granted your request. Please select available license level and enter the new software ID.

After successful payment the new license will be added to your account.

## 1. Available replacement levels:

### Level 1 (Demo)

USD 10

### License L3

USD 10

### License L4/P1

USD 10

### License L5/P10

USD 10

## 2. Enter the new Software-ID from your RouterOS installation

 Add license replacement to cart

7) An e-mail will be sent to your profile containing the new license.

- You can also find the newly generated key in the section "Search and view all keys" under the folder "Purchased YYYY" where "YYYY" is the current Year



*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.*

## Obtaining Licenses and Working With Them

### Where can I buy a RouterOS license key?

MikroTik devices come preinstalled with a license and no purchase is needed.

To obtain a higher level license, or to obtain a license for a x86 PC installation, you must register an [account on our webpage](#), and in there, use the option "Purchase a RouterOS license key".

### If I have purchased my key elsewhere

You must contact the company who sold you the license, they will provide the 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](#)

The only kind of licenses, that could be transferred to another Account is a prepaid key, which is purchased or is got from MUM. Prepaid keys got as a gift from the Training are not transferable.

To transfer purchased prepaid key navigate to "Transfer prepaid keys" in the section "ROUTEROS KEYS" on your MikroTik Account.

### If I have lost a license on my device?

If for some reason you have lost license from your router, upgrade router to the latest RouterOS version available and use "Request license key" in your [mikrotik.com](https://mikrotik.com) account. Use soft-id and serial number available under System/License menu in RouterOS when requesting license. Apply received license or contact [support@mikrotik.com](mailto:support@mikrotik.com) if request feature do not work.



*If the license was lost due to repairs and they were not done via the distributor under warranty, you will have to purchase a new RouterOS license for the full price!*

## 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?

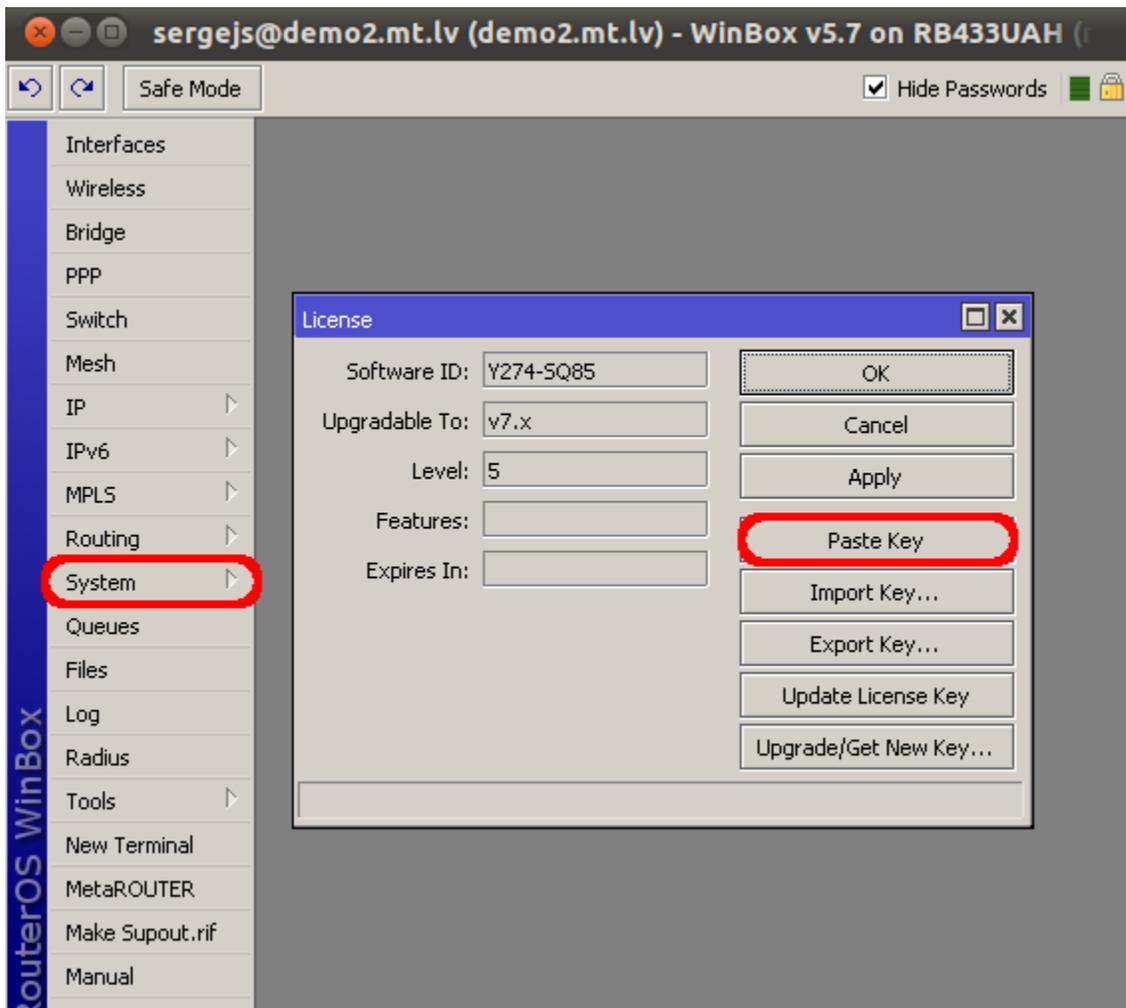
As stated above, no.

### 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\$

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

No, simply copy it and paste in the menu **System** --> **License**.



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

No, because if you use formatting, 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?

MikroTik hardware comes with an embedded license. You cannot move this license to a new system in any way, this includes any upgrades applied to the MikroTik router 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](http://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).

### I am not using the software, can you terminate my license?

The licenses are stand alone keys and MikroTik does not have any remote control over your devices. Therefore, we are unable to verify if you use your license or not. This is why MikroTik cannot terminate any issued licenses.