Packages

Summary

In RouterOS v7, most of the features are combined in one *routeros* (system) package.

Installing the corresponding package can enable specific features (like container, dude).

Packages are provided only by MikroTik, and no 3rd parties are allowed to make them.

Acquiring packages

Packages can be downloaded from the MikroTik download page.

RouterOS packages

Starting from RouterOS 7.13, the *routeros* (system) package and one of the wireless packages are needed for the basic operation of a simple home router.

802.11ax WiFi APs require radio drivers, which are provided by the *wifi-qcom* package or (for RouterOS version before 7.13) the *wifiwave2* package.

Previous generation WiFi APs require a *wireless* package.

Other packages are optional and not required for a home router. Install them only if you are sure of their purpose.

System packages

Package	Description
routeros-arm (*arm*)	system package for arm devices
routeros-arm (*arm64*)	system package for arm64 devices
routeros-mipsbe (*mipsbe*)	system package for mipsbe devices
routeros-mmips (*mmips*)	system package for mmips devices
routeros-smips (*smips*)	system package for smips devices
routeros-tile (*tile*)	system package for tile devices
routeros-ppc (*ppc*)	system package for ppc devices
routeros (*x86, CHR*)	system package for x86 installations and CHR environment

Extra packages

To install extra packages, download the necessary package from the MikroTik download page, selecting the RouterOS v6 section based on your device's architecture found in the System/Resources menu. Extract the archive and upload the required package to your router using any convenient method, and proceed to reboot the router.

> ⚠️ Certain packages, such as Container, require physical access to the router for installation.

⚠️

Package	Description
calea (*arm, arm64, mipsbe, mmips, tile, ppc, x86, CHR*)	Data gathering tool for specific use due to "Communications Assistance for Law Enforcement Act" in the USA
container (*arm, arm64, x86, CHR*)	Container implementation of Linux containers, allows users to run containerized environments within RouterOS
dude (*arm, arm64, mmips, tile, x86, CHR*)	Dude tool that allows monitoring of network environment
gps (*arm, arm64, mipsbe, mmips, tile, ppc, x86, CHR*)	Global Positioning System devices support
iot (*arm, arm64, mipsbe, mmips, tile, ppc, x86, CHR*)	Enables Bluetooth, MQTT, and LoRa functionality
lora (*arm, arm64, mipsbe, mmips, tile, ppc, x86, CHR*)	Lora support
lte (*mipsbe*)	Required package only for SXT LTE (RBSXTLTE3-7), which contains drivers for the built-in LTE interface.
rose-storage (*arm, arm64, tile, x86, CHR*)	Additional enterprise data center functionality in RouterOS, support disk monitoring, improved formatting, RAIDs, rsync, iSCSI , NVMe over TCP, NFS, and improved SMB
tr069-client (*arm, arm64, mipsbe, mmips, smips, tile, ppc, x86, CHR*)	TR069 Client package
ups (*arm, arm64, mipsbe, mmips, tile, ppc, x86, CHR*)	APC ups management interface
user-manager (*arm, arm64, mipsbe, mmips, tile, ppc, x86, CHR*)	MikroTik User Manager server for controlling Hotspot and other service users.
wifiwave2 (*arm, arm64, mmips, tile, ppc, x86, CHR*)	For 7.12 and older versions: WifiWave2 package for managing compatible 802.11ax and 802.11ac wave 2 wireless interfaces and WifiWave2 CAPsMAN for central WifiWave2 device management. Mandatory for 802.11ax devices.
wifi-qcom (*arm, arm64*)	Mandatory driver package for 802.11ax interfaces. Introduced in 7.13. Wifi CAPsMAN support comes with the system package.
wifi-qcom-ac (*arm*)	Optional Wifi driver package for compatible 802.11ac interfaces. Introduced in 7.13.
wireless (*arm, arm64, mipsbe, mmips, tile, ppc, x86, CHR*)	Utilities and drivers for managing WiFi (up to 802.11ac) and 60GHz wireless interfaces. This package is bundled into RouterOS for versions up to 7.12. Starting with 7.13, it is a separate package. The **wireless** package conflicts with **wifi-qcom** and **wifi-qcom-ac** packages - they cannot be active at the same time.
zerotier (*arm, arm64*)	Enables ZeroTier functionality

Working with packages

Menu: */system package*

Commands executed in this menu will take place only on restart of the router. Until then, the user can freely schedule or revert set actions.

Command	Description
disable	schedule the package to be disabled after the next reboot. No features provided by the package will be accessible
downgrade	will prompt for the reboot. During the reboot process will try to downgrade the RouterOS to the oldest version possible by checking the packages that are uploaded to the router.
enable	schedule package to be enabled after the next reboot
uninstall	schedule package to be removed from the router. That will take place during the reboot.

unschedule	remove scheduled task for the package.
print	outputs information about the packages, like: version, package state, planned state changes, etc.

Menu: */system/check-installation*

The "Check installation" function ensures the integrity of the RouterOS system by verifying the readability and correct placement of files. Its primary purpose is to confirm the health and status of your NAND/Flash storage.

Examples

The upgrade process is described here.

List of available packages.

zerotier package is disabled and dude package is scheduled for uninstall.

```
/system package print
Flags: X - DISABLED
Columns: NAME, VERSION, SCHEDULED
#   NAME       VERSION   SCHEDULED
0   dude       7.9       scheduled for uninstall
1 X zerotier   7.9
2   routeros   7.9
```

Uninstall package

```
/system package uninstall dude; /system reboot;
Reboot, yes? [y/N]:
```

Disable package

```
/system package disable zerotier; /system reboot;
Reboot, yes? [y/N]:
```

Downgrade

```
/system package downgrade; /system reboot;
Reboot, yes? [y/N]:
```

Cancel uninstall or disable action

```
/system package unschedule zerotier;
/system package unschedule dude;
```