New Feature Review

layer7-protocol

In RouterOS v3 there is a new firewall matcher called layer7-protocol. It is looking for predefined strings in icmp/udp/tcp packets. You can use Regular Expressions (regexp) to define patterns to look for. This is very useful to find and control connections by applications that connect to different ports every time, use encryption, or are difficult to track in general. For example now you can make custom rules to control applications like Skype, Ares, or MSN that are not based on used ports, but on patterns in their communication.

```
/ip firewall layer7-protocol add=
/ip firewall filter add layer7-protocol=
```

In the Firewall layer7-protocol menu you can add regexp strings called protocols, give them names, and later use them in the Firewall filter facility to drop them. This facility will not look in individual packets, but in whole connections. It will gather data until the 10th packet or 2KB, whichever comes first.

If no match is found during this time, the protocol is not known.

There is a compiled list of patterns found in common applications available, so you can now instantly block Skype which was not possible before.

More information about l7 can be found in this resource: http://l7-filter.sourceforge.net/protocols

or on the MikroTik Wiki:
http://wiki.mikrotik.com/wiki/L7

RouterBOARD 21

MikroTik is proud to announce it's newest RouterBOARD model, the tiny RouterBOARD21, which is a miniPCI to miniPCI-express adapter.

miniPCI express is a new form factor which essentially is smaller, faster and more convenient.

As miniPCI express interfaces are becoming more popular, we want to make sure you have the ability to use them in all your routers, without having to exchange whole devices. Just use this interface card, and miniPCI express cards will work completely natively, 3G mobile cards, 802.11n and many other exciting technologies are now available to you!

Wireless Area

Area is a part of a mesh network, for limiting station access to a certain number of APs (e.g., a building or a block). All APs within the mesh may have the same SSID, but stations will select only a few ones, based on their area code.

The Area setting is configured on APs in the wireless menu. This can be done with the goal to limit connectivity (to force the station to stay within a certain area), or to improve connection quality (as the station will not try to connect to APs from other areas, which may have worse signal quality).

The stations can be configured to connect to any AP that has its area code beginning with a certain string (area-prefix parameter in wireless connect list), so you configure areas within areas, and make some stations only work within a subarea, and allow some other stations to work within a larger area.

For example stations with area-prefix="area1" will connect to any AP with area code "area1.1" and "area1.2", but if you specify area prefix as "area1.1", then that station will only connect to APs with area code "area1.1"; you can subdivide areas even further.

```[admin@router] /interface wireless> set wlan1 area=
[admin@router] /interface wireless connect list>
add area-prefix=
```

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```[admin@router] /interface wireless connect list>
add area-prefix=
```

See: http://wiki.mikrotik.com/wiki/Wireless_Area
Free Stuff

As you know, Tiktube.com accepts videos that you have filmed at the MUM events, or even your own router installation sites. These videos get evaluated and the best submitters receive free licenses.

Well now there's more. Write an article for the newsletter, and you can also earn a free RouterOS license. If the article is very good and helpful, we will also put it in the Wiki.

Or you can simply make an article for the Wiki to get your license.

Translating the Dude to your own language also earns you a RouterOS Level6 license.

So how about that - four ways to earn free licenses for RouterOS!

RouterOS Changelog

What's new in 3.0rc7:

*) console detects terminal size and capabilities, TERM environment variable is not used, so now this works even over serial;
*) fixed layer7 protocol matcher, did not handle 'x.. sequences correctly

What's new in 3.0rc6:

*) RIP - fixed some problems;
*) RIP - automatically distribute connected routes falling within range of some configured network;
*) RIPng - network configuration statements removed, interface configuration now is mandatory;
*) added support for IPv6 Firewall in WinBox;
*) added support for IPv6 DNS cache in WinBox;
*) added support for MME routing protocol in WinBox;
*) added support for L7 matcher in WinBox;
*) added support for Prolific 2303 based USB serial devices;
*) specify tcp-mss in dynamically added PPP mangle rules & do not add them when mtu is bigger then 1500;
*) fixed USB UPS detection;
*) fixed bug - PPTP client did not work with Windows PPTP server;
*) limited number of active authentication sessions for PPPoE server to not overload RADIUS server;
*) fixed bug - ssh command did not work on RB333;
*) added support for Intel EXP9404PT PCI-E ethernet adpater;
*) added simple SNTP client to system package & removed regular ntp from bundle package;
*) updated timezone information;

New CPE Product at the MUM in Egypt

Some very exciting news - a previously never seen, unannounced CPE product will be demonstrated at the MUM. It will be a high speed / low cost CPE with performance ratings never before seen in this price range. The only place to see it will be at the MUM egypt, so make sure you are signed up on the MUM webpage.

Also at the MUM - the special USB EVERYTHING announcement and demo.

There is going to be a 4-day training before the MUM. The training is at the same location as MUM and starts on Nov 17th.

The MUM will take place in Sharm El Sheikh on November 21-22 this year.

The MUM in Egypt will be the biggest MUM of the year, welcoming visitors from Europe, the Middle-East, Africa, and of course all other parts of the world. Don't miss out as this MUM will have the most MikroTik technicians, managers, and users on site. Sharm el Sheikh is a very popular winter holiday destination for Europeans with low cost charter and regular flights from almost all European countries. Also, Sharm el Sheikh is a favorite destination and meeting place for the people of many Middle-East and African countries. The conference hotel, Grand Rotana Resort & Spa, is one of the newest and best five star hotels in Sharm el Sheikh. Our staff has been there and inspected their facilities. We have negotiated a very good group rate. Don't miss out on this great event.

Join in, go to http://mum.mikrotik.com

RouterBOARD 1000 Teaser

This is a preview of the upcoming RouterBOARD 1000 case design: