



Configuring Aradial

Mikrotik Bandwidth Control



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<http://www.aradial.com>

<http://www.radius-server.com>

<http://www.wifi-radius.com>

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Mikrotik Bandwidth Control

Limit the Bandwidth

In order to configure the bandwidth using Mikrotik, Aradial uses VSA (Vendor Specific Attributes) from Mikrotik:

VSA Definition:

rate-limit (text; default: "") - Rate limitation in form of rx-rate[tx-rate] [rx-burst-rate[tx-burst-rate] [rx-burst-threshold[tx-burst-threshold] [rx-burst-time[tx-burst-time] [priority] [rx-rate-min[tx-rate-min]]]] from the point of view of the router (so "rx" is client upload, and "tx" is client download). All rates should be numbers with optional 'k' (1,000s) or 'M' (1,000,000s). If tx-rate is not specified, rx-rate is as tx-rate too. Same goes for tx-burst-rate and tx-burst-threshold and tx-burst-time. If both rx-burst-threshold and tx-burst-threshold are not specified (but burst-rate is specified), rx-rate and tx-rate is used as burst thresholds. If both rx-burst-time and tx-burst-time are not specified, 1s is used as default. Priority takes values 1..8, where 1 implies the highest priority, but 8 - the lowest. If rx-rate-min and tx-rate-min are not specified rx-rate and tx-rate values are used. The rx-rate-min and tx-rate-min values can not exceed rx-rate and tx-rate values.

Use the following string schema: x1k/y1k x2k/y2k x3k/y3k x5/y5 P x6k/y6k

where:

x1k/y1k: Rate	(txrate/rxrate e.g 128k/1024k)
x2k/y2k: Burst Rate	(e.g 256k/2048k)
x3k/y3k: Burst Threshold	(e.g 160k/1280k)
x5/y5: Burst Time	(in seconds e.g: 60/60)
Priority: P	(use integer from 1-8)
Minimum rate: x6k/y6k	(e.g 32k/256k)

Configuring Aradial Mikrotik Bandwidth Control

1. Configure the NAS to use Mikrotik.
2. You can review Raddb\NasCfgDbs to view how the BW service is implemented:

At the Mikrotik section:

[Mikrotik]

Dictionary=Mikrotik.dic

IgnoreAcctSig=Yes

UniquePorts=No

BW:User-Service-Type=Framed-User,Framed-Protocol=PPP,Framed-Address=\$FramedAddress,Framed-Filter-Id=\$FramedFilterId,Framed-Netmask=255.255.255.255,Rate-Limit=**\$bwrate**

In the Aradial user or Group screen in RADIUS Attributes please put:

\$bwrate=128k/256k 100000000k/100000000k 96k/192k 8

Override Group Profile (Leave blank to Use default group profile)

Service:	<input type="text" value="BW"/>	<input type="button" value="v"/>
Remote IP:	<input type="text"/>	Filter: <input type="text"/>
RADIUS Attributes:	<input type="text" value="\$bwrate=128k/256k 100000000k/100000000k 96k/192k 8"/>	

Limit the Upload MB and Download MB

Aradial automatically limits the MB for both up and down when using the Metering feature.

The VSA attributes to use:

MTK-Total-Limit - limit in bytes until 4GB.

MTK-Total-Limit-Gigawords - in 4GB units. 2 mean 8GB.

If one wishes to create new services and configure the limits for upload and download manually:

The VSA attributes to use:

Recv-Limit - limit downloads in bytes until 4GB.

Xmit-Limit - limit uploads in bytes until 4GB.

Recv-Limit-Gigawords - in 4GB units. 4 means 16GB.

Xmit-Limit-Gigawords - in 4GB units. 4 means 16GB.

Example:

BW:User-Service-Type=Framed-User,Framed-Protocol=PPP,Framed-Address=\$FramedAddress,Framed-Filter-Id=\$FramedFilterId,Framed-Netmask=255.255.255.255,Rate-Limit=\$bwrate,**Recv-Limit=100000,Xmit-Limit=50000**