802.11e WMM

Contents

What is 802.11e WMM?

802.11e wireless standard uses Enhanced Distribution Coordination Function (EDCF) to categorize traffic. It provides basic Quality of Service (QoS) functionality for Wireless networks.

The WiFi Multimedia (WMM) specification is a subset of 802.11e. It stipulates traffic with different fixed and random wait times in the four prioritization categories (voice, video, best effort, and background). This is done to ensure that applications, which are less tolerant of packet delays, have a higher priority of network access. The result of this being that devices that can't afford a higher wait time have a better chance to transmit than those that can.

802.11e user priorities and access categories

Pairs of user priority (UP) values are mapped in accordance with four defined access categories, which specify different treatments of frames over the air. These access categories and their corresponding UP relationships can be seen in the table below:

USER PRIORITY	ACCESS CATEGORY	DESCRIPTION
7 6	AC_VO	Voice
5 4	AC_VI	Video
3 0	AC_BE	Best Effort
2 1	AC_VO	Background

802.11e WMM in RUTxxx routers

WMM (802.11e) support is enabled in RUTxxx routers by default. You can disable this by executing the following commands via a Command line interface:

```
uci set wireless.@wifi-iface[0].wmm='0'
```

```
uci commit wireless
wifi
```

This set of commands sets the WMM option to *0* (disabled), commits the changes and restarts the wireless radio in order for the changes to take effect. If you wish to turn WMM support back ON, change the *0* to a *1* (enabled) at the end of the first line:

```
uci set wireless.@wifi-iface[0].wmm='1'
uci commit wireless
wifi
```

NOTE: WMM is required for 802.11n support.