Fair Usage Policy Implementation - Part II

We have provided a basic policy implementation for fair usage. In this example we will provide detailed configuration for PEAP in Mikrotik devices. In this example users have daily 500 MB quota and TekRADIUS will disconnect user session when the user consumes all assigned quota. User will be able to login after midnight when TekRADIUS will update user’s daily quota. Session termination is done by sending a RADIUS disconnect request.

Network Topology

![Network Topology Diagram]

Mikrotik Configuration

Click IP / Addresses in Mikrotik WinBox menu and set an available IP address in your LAN for the bridge interface. You connection to the wireless device may be lost after this procedure. Try to re-connect if your connection is lost.

![Mikrotik Configuration Screenshot]
Set wireless interface parameters. Click Wireless in Mikrotik WinBox menu. Create a security profile first. Click + at Security Profiles tab.

Enter recommended values as shown above for General parameters. Set EAP Accounting at RADIUS tab.

Set EAP Methods = passtrough at EAP parameters tab.
Double click wlan1 interface at Interfaces tab. Set “ap bridge” as Mode, set a name for SSID, set Bridge Mode = enabled, select previously set security profile, select Default Authentication option at the bottom.

Create a RADIUS server profile for wireless service next. Click Radius menu option in Mikrotik WinBox menu. Select only “wireless” as Service option, enter IP address of TekRADIUS installed machine, shared secret for RADIUS communications, 1812 for the authentication, 1813 for the accounting port. 5000 ms is recommended for the Timeout parameter. Click OK to accept settings.
Click Incoming button, click Accept option and set 3799 as Port.

**TekRADIUS Configuration**

Create a RADIUS client entry for the wireless access device first. The ‘Interim Update Period’ may be set to force TekRADIUS to clear any associated active sessions and simultaneous session entries.
if an update is not received in the period specified. The minimum allowed value for interim update period is 60 seconds. 300 seconds (5 minutes) is set as interim update period in this example. You need to set Mikrotik as vendor.

User and Group Profiles

Here are typical group and user profiles created for this scenario;
Sample user profile

User profile has **Credit-Period = Daily** and **Credit-Per-Period = 5000 attributes.** These attributes grant user to have 500 MB data usage. User’s data quota will be reset daily. You can also set User-Credit manually when needed.

TLS-Server-Certificate is required for PEAP authentication you can create a server certificate using TekCERT.

TekRADIUS will disconnect user session(s) when all the the credit is consumed. You can disconnect active user sessions manually through Active Sessions tab by selecting active user sessions and clicking **PoD** button.