# Assign a Static IP Address to a PEAP/EAP Authenticated Wireless / Wired Client with TekRADIUS

Most of Access Point devices have a built-in DHCP server. A PEAP/EAP authenticated client can obtain an IP address and other network connection parameters from this built-in DHCP server. You can also make IP address reservation based on Ethernet MAC addresses. But these DHCP servers do not allow you make reservation based client's PEAP/EAP username. Network administrators may require network users to have the same IP address regardless of the device that client connects to the network because of security policy. In some cases Access Point devices may be lack of RADIUS Accounting support. Network administrators cannot track IP address usage based on the username in such a case.
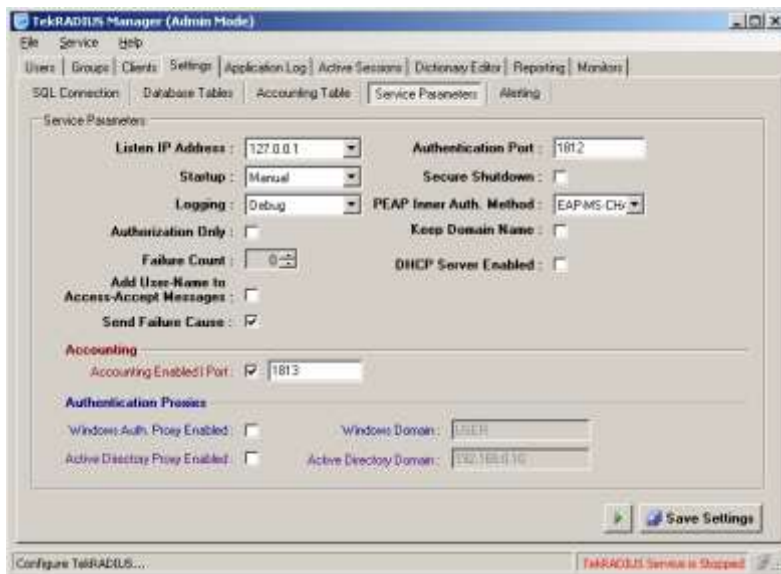

DHCP Server Option at Settings / Service Parameters tab

TekRADIUS addresses this problems and needs by its unique feature; assignment of IP addresses to wired/wireless clients authenticated using PEAP/EAP authentication.
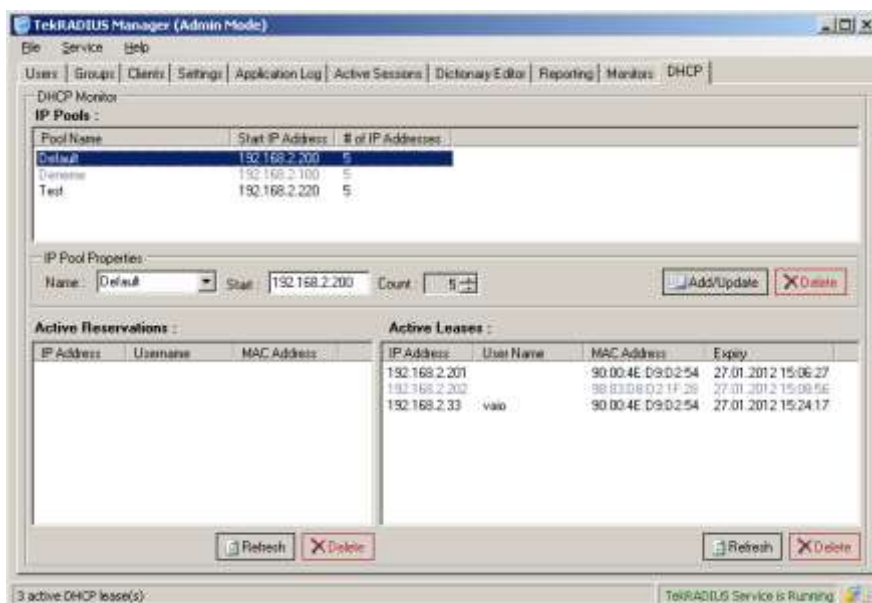

DHCP tab

You must define at least one DHCP pool named "Default". TekRADIUS will assign IP addresses from this pool if an individual DHCP profile is not found for the incoming DHCP request. You can define individual profiles for users based on their MAC addresses. You can assign IP address from a DHCP IP Pool by adding DHCP-IP-Pool option or specify a specific IP address by adding Framed-IP-Address as a Success-Reply attribute to DHCP profile.
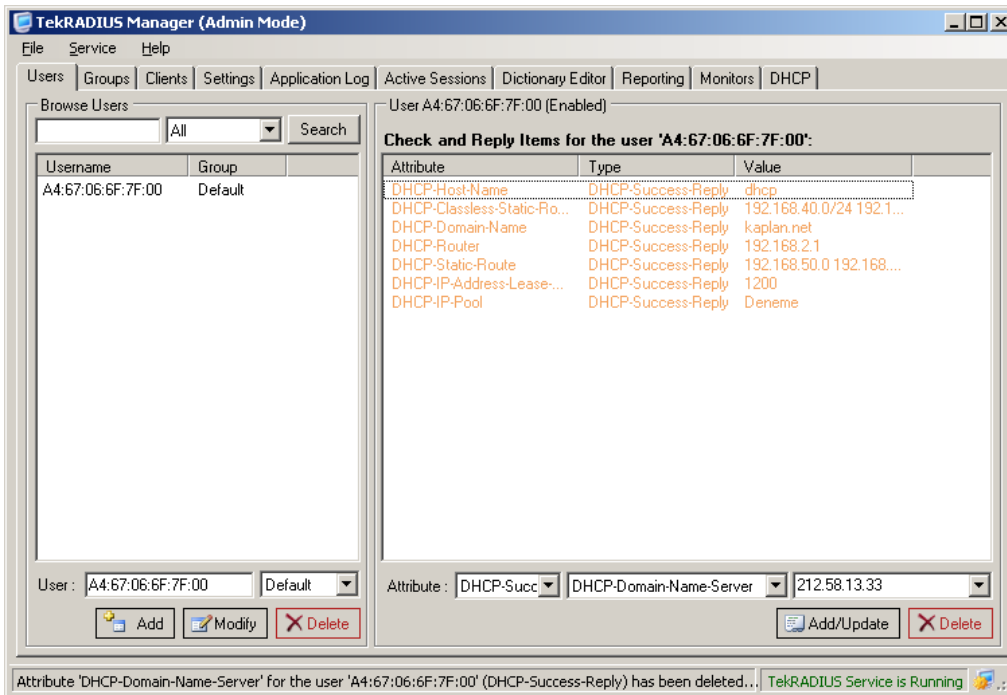
DHCP profile based on MAC Address

If you have a commercial edition of TekRADIUS you can add DHCP options to the user profile.
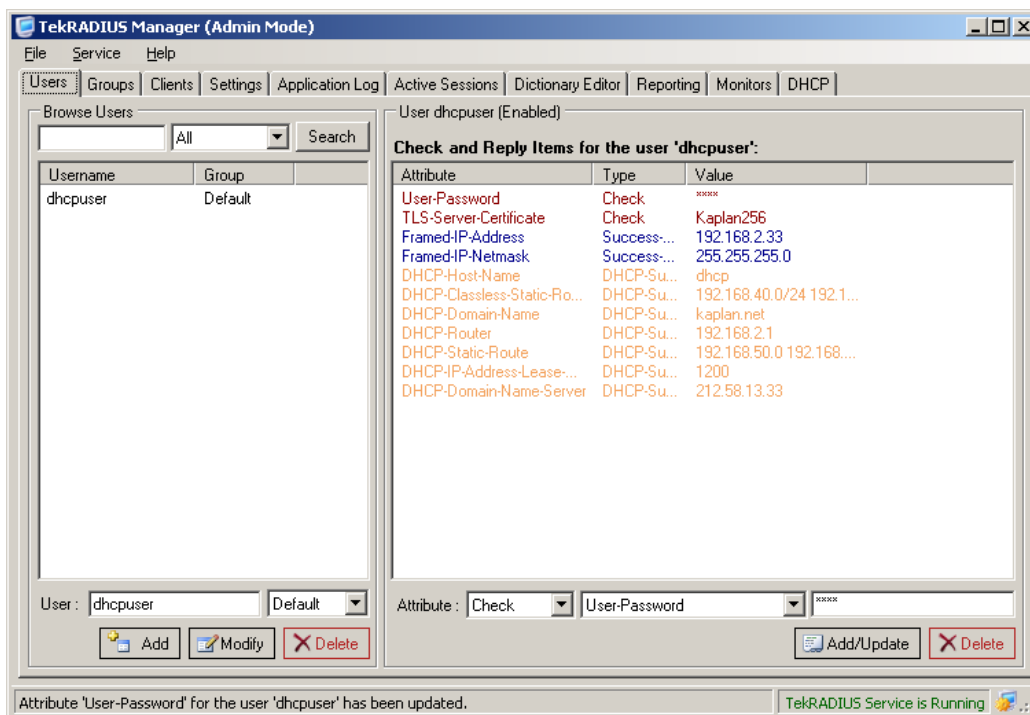
User profile with DHCP options

Following RADIUS attributes are translated to DHCP options if they exist in user profiles;

RADIUS Attribute	DHCP Option
Framed-IP-Address	DHCP-IP-Address
Framed-IP-Netmask	DHCP-Subnet-Mask
Framed-Route	DHCP-Classless-Static-Route
Session-Timeout	DHCP-IP-Address-Lease-Time

DHCP-Classless-Static-Route value must be entered in following format;

```
<Network>/<Network Bits><Space><Router IP Address>
```

Sample;

```
192.168.0.0/24 192.168.0.1
```

If a DHCP IP pool is ran out of IP addresses and Mail Alerting is enabled, TekRADIUS will send a notification with an e-mail. You can monitor active DHCP assignments through DHCP tab.

You can disable a DHCP profile by adding TekRADIUS-Status = Disabled (Check) attribute.

DHCP server is available in both free and commercial editions of TekRADIUS but IP address assignment to wireless users based on their usernames feature is available only in commercial editions of TekRADIUS.