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.

Connection Database Tables	Accounting Table	Service Parameters Alatting		
rice Parameters				
Listen IP Address :	127.0.01 -	Authentication Port :	1812	
Startup : Logging : Authinization Drify :	Menual	Secure Shutdown : PEAP Inner Auth. Method : Keep Domain Name : DHCP Server Enabled :	EAP MS CH	
	Debug ·			
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Failure Count :	0.0		-	
Add Uzer-Name to Access-Accept Messages :				
Send Failure Cause :	F			
Accounting				
Accounting Enabled Part :	1813			
Authentication Pressies				
Windows Auth, Proxy Enabled	E w	ndowe Domain : DITER		
Active Directory Provy Enabled	F Active Dir	ectory Domain: 1992.166.010	_	

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.

P Pools :		115 4 11			
Pool Name	Shet IP Address #	of IP Addresses			
Fériétie	192168.2.100 5	-			
est	192.168.2.220 5				
P Pool Properties					
clive Reservations :		Active Lease	100 million		
P Address Usemane	MAC Address	IP Address	Liset Name	MAC Address	Expiry
		192,168,2,201		90.00.4E.09.02.54 98.83.08.02.1F.29	27.01.2012 15:06:27 27:01.2012 15:08:56
		192 168 2 33	vaio	90 00 4E D9 D2 54	27.01.2012 15:24 17

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.

٦	📁 TekRADIUS Manager (Admin Mode)						_ 🗆 ×
Ei	le <u>S</u> ervice	<u>H</u> elp					
l	Jsers Groups	Clients Setting	gs Application Log	Active Sessions Dictionary I	Editor Reporting Moni	tors DHCP	
Г	Browse Users	· · · ·		User A4:67:06:6F:7F:00 (Ena	abled)		[
		All	▼ Search	Charle and Darly Barry (
	, 	,		Check and Reply Items f			
	Username	Group		Attribute	Туре	Value	
	A4:67:06:6F:7	F:00 Default		DHCP-Host-Name	DHCP-Success-Reply		
				DHCP-Classless-Static-Ro DHCP-Domain-Name	DHCP-Success-Reply DHCP-Success-Reply	192.168.40.0/24 192.1 kaplap.pet	
				DHCP-Router	DHCP-Success-Reply		
				DHCP-Static-Route		192.168.50.0 192.168	
				DHCP-IP-Address-Lease			
				DHCP-IP-Pool	DHCP-Success-Reply	Deneme	
	U A4.07.0	00.05.75.00	Default 🔻			ver 💌 212.58.13.33	
	User : A4:67:1	U6:6F:7F:UU		Attribute : DHCP-Succ	UHUP-Domain-Name-Ser	ver 1212.08.13.33	
	<u></u>	Add 📝 Modi	ify 🗙 Delete			📃 Add/Update 🚺	X Delete
TL							100.000
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Atl	Attribute 'DHCP-Domain-Name-Server' for the user 'A4:67:06:6F:7F:00' (DHCP-Success-Reply) has been deleted TekRADIUS Service is Running 🛷 🤃						

DHCP profile based on MAC Address

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

🧐 Ei	TekRADIUS Manage ile <u>S</u> ervice <u>H</u> elp	r (Admin Mode)					
[Browse Users			Active Sessions Dictionary E User dhcpuser (Enabled)	ditor Report	ing Monitors DHCP	1
			irch	Check and Reply Items fo		•	
	Username dhcpuser	Group Default		Attribute User-Password TLS-Server-Certificate Framed-IP-Address Framed-IP-Netmask DHCP-Host-Name DHCP-Classless-Static-Ro DHCP-Domain-Name DHCP-Static-Route DHCP-IStatic-Route DHCP-IStatic-Route DHCP-ID-Address-Lease DHCP-Domain-Name-Server	Type Check Check Success DHCP-Su DHCP-Su DHCP-Su DHCP-Su DHCP-Su DHCP-Su	192.168.40.0/24 192.1 kaplan.net 192.168.2.1 192.168.50.0 192.168 1200	
	User: dhcpuser	Default	• lete	Attribute : Check	Jser-Password	XXXX Add/L	Jpdate X Delete
At	tribute 'User-Password' I	for the user 'dhopuser	' has b	een updated.		TekRADIUS	Service is Running 😺 🤃

User profile with DHCP options

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

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

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.