Pro Radius
manager

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1. Introduction

Pro Radius Manager is a stable, feature rich and easy to use systam based on Free Radius and it is best suitable for Internet Service Providers and any kind of HotSpots. The instalation package installs fully configured Linux OS and Radius Manager Panel from which the system can be modified(MySQL, Network Interface, Domain Name...) if needed.

It has a highly optimised and functional user managing interface which is perfect for large ISPs, but also simplicity of use and intuitive design that makes it great for HotSpots.

Main purpose of Pro Radius Manager is lowering IPS user managing work to minimum and all in one place. Here are some of the features:

- User managing system
- Group managing system
- Manager system with detailed permission control
- Grouping users by region and manageing as such
- NASes with integrated API for connecting with MikroTik and CMTS systems
- Automatic invoice generating

We will talk about all this features and more in the next chapters of this manual.

2. Users

Users are fundamental part of Pro Radius Manager and all sections are integrated in creating and managing them. This manual will guide you trought a couple of easy user sections in order to help you learn how simple user managing can be.

The sections we are going to cover are:
- Creating new users
- List and search users
- Edit/delete existing users

Some features that are intuitive or self-explenatory may not be mentioned in this section. Also some features that are part of the other sections of Pro Radius Manager, such as NASes, Regions, Managers, will be thorouly explained in coresponding sections of this manual.

2.1. Creating users

User creation screen can be found under User->New User.

The New User screen may have mandatory fields depending on a user type, however it is required for all users to have at least one Region defined. Region can be added throught Region->New Region screen. Detailed explanation of regions can be found in Regions section of this manual.

There are 2 basic types of users:

- DHCP user
- Regular user

DHCP user is set by default and it is authenticated based following atributes:

- MAC address
- WPA-PSK,
- Simultaneous use,
- Connection place,
- Station ID.

MAC address is mandatory if any *WPA-PSK* is entered, and it is unique, which means that there can NOT be 2 users in a system with a same MAC address. However, there can be several users with a same MAC address connected at the same time, and the number of that connections can be controled with a *Simultaneous use* field. *Simultaneous use* also apears in group creation and editing screen, but more about that in group creation section.

Connection place restricts that user to that NAS only, meaning that user is only able to connect to the defined NAS. *Station ID* field does the same thing, only that it binds the user to specific SSID. Both of this fields are not mandatory and if not defined gives that user freedom to connect to any station and SSID available in a network.

Regular user has a couple of additional fields and requirements and represents a higher level of authentication. It requires establishing a PPP type of connection by user in order to connect to network. It has all the DHCP user field, plus the following fields:

- User name,
- Password,
- Static IP address,
- Netmask.

User name and *Password* are mandatory fields for Regular users and *User name* is unique, just like *MAC address*, there can't be two same in a system. You don't have to worry about that, if the system finds the name it will notify you and display the info on the user that has the same User name.

Static IP address is self explanatory. It just sets the IP address to be static and at your choice. Netmask as well.

Besides DHCP and Regular user type of user, there are also 2 types of client:

- Physical entity
- Company

These represent a individual and a company client. Both have a unique fields.

For a *Physical entity* client type unique field is *JMBG*, but it's not mandatory. There can be many same First and Last names, but only one *JMBG* in a system.

As for a company entity, there are 2 unique identifiers and they represent the company ID numbers: *JIB* and *PIB*.

The user is add by pressing the Add user button in the bottom right corner of the screen. If there are no duplicate MAC addresses or other unique fields user is created and you are redirected to a Edit user screen. From there you can further edit your user, add group packages to it and much more.

Tip: New user screen can be quickly opened by pressing "2" when on a home page.

Warning: by default, newly created users are disabled, and can not be enabled until a group is assigned to them.

2.2. List and search users

In order to list existing users and find a specific user you can find 2 options under User dropdown menu. User->List users lists all users on a system and orders them by ID.

User->Find users opens a screen for user search. As you type some keyword in a search field it will narow down a number of matching users. You can enter a several keywords separated by a space character and the system will automaticly find all users that match all of the entered keywords.

Keywords are following atributes:

- User name(if user type is *Regular user*)
- MAC address
- First name
- Last name
- Company name
- Date of expiration of a current group assigned to user
- Name of current group

Tip: Find users screen can be quickly opened by pressing "1" when on a home page.

2.3. Editing/deleting existing user

Edit user screen can be opened by selecting desired user from List users or Find users screen. It is also opened automaticly after user is created.

It looks similar to New user screen, with some additional sections. There are 3 sections in total:

1. User and NAS paramaters and logs
2. Edit user
3. Schedule

1. User and NAS paramaters and logs

This section can be found on the top of the Edit user screen area. It displays usefull data about currently opened user and NAS that user is connected to.

In order for Pro Radiusm Manager to know what NAS user is connected to, you need to define that NAS through NAS->New NAS interface and assign it to a user in Additional info section. Once NAS has been assigned the system will automaticly check for user and NAS parameters and logs every 60 seconds, or it can be manualy refreshed.

There are 4 parameter groups in this section:

- User parameters
- User logs
- NAS parameters
- NAS logs

User parameters presents the connection information about user and connection status. Here are all the parameters that are displayed in this section:

- MAC Address
- Interface
- Uptime
- Downloaded
- Uploaded
- Signal Strength

- Signal To Noise
- Tx / Rx ccq
- P Throughput
- Registration Date
- Registered by
- Last edited by
- Ip DHCP
- Ip PPP

2. Edit user

This section has all the info that you get on a New user creation screen with a couple of extra possibilities. First of all you have a *Enable user* checkbox, and it is unchecked by default until a group has been assigned to it. You can disable a user at any time after you add a group to it, which will disable that user until enbled again, regardles of a group assigned to them.

There are also 2 usefull buttons at the bottom of this section:

- Disconnect user
- Clear sessions

Disconnect user disconnects the user from a network in case you need it. The user can reconect afterwards.

Clear sessions is used in case it (in rare cases)happens that user is reported connected on Pro Radius Manager, but in fact is not connected.

From this section you can also delete this user by using the *Delete user* button. Since there might be invoices and queued groups connected to this user, deleting it will also delete related invoices and queued groups.

Warning: You can NOT undo delete user action, nor you can return the invoices from that user.

Tip: If you want to keed the invoices, we sugest leaving user as is but only disabled. Aslo, we recomend removing its MAC address and/or user name in order for other users to have acces to it, since it's unique.

3. Schedule

This section is on the bottom of the edit user screen and contains options for adding, deleting and removing groups. It also contains history of all groups user has used with periods and managers that have added it.

One of a great feature of Pro Radius Manager is that groups can be queued to the user, meaning there can be unlimited number of queued groups that are executed after the previous group expires.

Whenever you add a group to a user, the invoice is automatically generated based on a group you have added and a quantity you have entered while adding. You can see the invoice using the link that appears when you add the group, however, the invoice does not get deleted if you delete the group. If you do need to delete an invoice too, you can manualy find the invoice in a Financials->List invoices screen, or you can use a link that appears when you delete a group that has an invoice connected to it.

Also have in mind that invoices do not get generated automatically if you edit the group manualy after adding it.

3. Groups

Groups are also one of the fundamental parts of Pro Radius Manager and without them User section alone would be useless. Why?

Groups represent predefined packages that can be assigned to users. By assigning a group to users we give that user certain connectivity limits, such as:

- Expiration date
- Traffic limit
- Download/upload rate
- Simultaneous use

In the next few pages we will explain working with groups and how to organize groups to easily manage you user needs.

Some features that are part of the other sections of Pro Radius Manager, such as Taxes will be thorouly explained in coresponding sections of this manual.

3.1. Creating groups

Group creation screen can be found under Groups->New Group.

The New Group screen is split into 2 logical sections:

- Basic info
- Pricing

Basic info holds the following fields:

- Group name
- Limit download / upload rate
- Limit download / upload total traffic
- Traffic exceed download/upload rate
- Simultaneous use

Group name is a basic recognition attribute and therefore is unique and mandatory.

Limit download / upload rate is optional and can be enabled by checking the box next to it. This fields is self explanatory and there is no need to explain what it does.

Limit download / upload total traffic is also optional and can be enabled by checking the box next to it. It is used to limit the group users download and upload total traffic. By enabling this option *Traffic exceed download/upload rate* aslo becomes available for use.

Traffic exceed download/upload rate is used for limiting group users download/upload rates after they have spent total traffic allowed.

Note that if *Traffic exceed download/upload rate* is not activated, group users that have traffic limitations will be completely disconnected after they have used up all the traffice.

Simultaneous use represent the number of simultaneous connections a user with this group can have. This number can also be set directly on a user, this way is just easier to make same setting for entire group of users.

Pricing section controls these attributes:

- Unit period
- Total traffic unit
- Tax
- Price
- Price with tax

Unit period requires you to set a number and a period (day, month, year). It represents a single time period for this group for which a entered *Price with tax* will be calculated.

Total traffic unit represent a number of Megabytes for which a entered *Price with tax* will be calculated.

Tax is a select input type attribute that draws information from Financials->List taxes section of Pro Radius Manager. It's basically a type of tax that will be applied for this group when calculating invoices. You can define a new tax through Financials->New tax section. More on that topic in 7.2.1. section of this manual.

Price stands for a price of single group package when assigned to user without tax value added. Price is automaticlly calculated when user changes *Price with tax* value or *Tax* value, or it can be manualy entered in which case the *Price with tax* will be automaticlly calculated based on *Tax.* h

Price with tax stands for a price of single group package when assigned to user with tax value added. Like *Price*, it can be manualy entered or it can be automaticlly calculated based on *Price* and *Tax* value.

3.2. List groups

You can access all groups through Groups->List groups which opens up a screen with all currently existing groups with following basic paramaters:

- Group name
- Rate limit
- Traffic limit
- Exceed rate limit
- Price
- Users

Group name is a defined name of the group.

Rate limit represent download and upload rate of that group if the *Rate limit* has been enabled.

Traffic limit represents a group traffic limit in Megabytes if it is enabled for that group, otherwise it is unlimited.

Exceed rate limit represent download and upload rate of that group users if the group users exceed allowed traffice limit.

Price is price of a group with tax value added.

Users shows us how many users currently have this group assigned to them and currently active.

You can edit any of the listed groups. In order to get to editing screen click on the *Group name* of desired group. We will talk about editing groups in the next section of this manual.

3.3. Editing/deleting existing groups

Edit group screen can be opened by selecting desired group from List groups screen.

All of the features here have been explained in Creating groups section of this manual, only diference is there are 2 extra buttons for managing:

- Delete
- Transfer

Delete does exactly what it says: deletes the group. Due to organisation logic, you are not allowed to delete group that is currently assigned to users. If you still try to delete, Pro Radius Manager will recognise it and ask you first to transfer users to different group.

Transfer is used for transfering users to a different group. It is usefull for changeing great number of users from one group to another with single click.

4. Regions

Regions represent an attribute that can be created and assigned to users in order to group users that belong to same region, location or any kind of logical group that you wish. After the region has been created it can be used to assign only users with that region to be controled by a certain manager.

Simplest example of use would be to create regions for every geographical area. Lets say you create following regions: France and Spain. After you add this regions to users that belong to each region, you can set managers that should control users from France to only have permissions to manage users with that region.

We will explain managers and region attribute in corresponding section of this manual, but for now lets see how we can create regions.

4.1. Creating regions

Regions are created through Regions->New region menu. Adding new region is fairly simple and it only requires naming the desired region.

Name of the region must not be empty and must be unique since this is the only attribute of a region.

For adding multyple regions fast, after adding a region *Add another region* button apears and by clicking on it you are redirected to another region creation screen.

Also, after region has been created it apears on user creation/editing screen as well as on manager creation/editing screen.

In next section we will explaing Listing regions.

4. Regions / list regions

4.2. List regions

To list all existing regions open up a screen through Refions->List regions menu. It lists all regions with total number of users that currently belong to that region. In this section you can select a regions that you want to edit/delete by clicking on a region name.

4.3. Editing/deleting regions

Edit regions screen is same as region creation screen with extra *Delete* and *Transfer* buttons.

Delete button deletes this region permanently and will not allow deletion if there are currently users with this region assigned to them. If that is the case, then system will prompt you to transfer users to another region in order to delete it.

You can also just *Transfer* all users that use this region to another region, in case you want to merge users from 2 regions to one.

Tip: Be carefull what region you are transfering users, since it can NOT be undone. Managers that have permissions for current region, may not have perrmission to manage users from another region, and therefore may lose control over them.

5. Cards

Cards have lot of similarities with users, and so we will not be explaining all the fields and features related with cards, but instead the differences and what is good for what.

Cards are designed to be one-time usable packages that you could sell to your customers.

Main difference between cards and users is that Cards have Card groups that are being spent by customer being online, while Users have Groups that have defined expiration period which is defined when Group is added to the User.

To simplify, cards are designed mainly for users to easily and quickly access the internet by simply buying a card and activating it.

In the following sections we will explain adding cards.

5.1. Creating cards

To create card, go to Cards->New Card. There are two tabs there, Single card and Multipe cards. We will cover both of them here.

Single card tab allowes you to create single card and add all of its information. The menu look almost identical to New User screen, with a couple of differences.

These are new fields that we will cover:

- Generate random credentials
- Card group

Generate random credentials, when checked, disables Username and Password fields and generates a random string for you. It is a mandatory field.

Card group is also a mandatory field and lets you select a Card group to be assigned to the card defining card expiration period, limit, price...etc.

Multiple card tab lets you generate multiple cards at once. It cuts most of the work for you and is usefull when selling a lot of cards.

It allowes you to set the following information:

- Number of cards
- Cards group
- Simultaneous use
- Connection place
- Station ID
- NAS
- Region

Cards group, Simultaneous use, Connection place, Station ID, NAS and *Region* is explained in other sections of this manual or is self explanatory.

Number of cards lets you set a number of cards to be generated. It can be set to any number.

Note that all the cards added through *Multiple card* menu will have randomly generated credentials which can be changed later, if needed to.

All created cards can be listed and printed through Cards->List/Print cards, which we will explain in next section.

5.2. List/Print cards

Cards can be listed by accessing List/Print cards section through Cards menu item. Here is automaticly listed all created cards with their basic information.

These cards can be easily filtered by entering any keywords in the search input field on top of the section. Filter searches for any keywords entered in following card fields:

- Card username
- Card first name
- Card last name
- Card company
- Card group name

In the list, all of the top fields are displayed with addition of the *Id* and *Sold* fields.

Id is the main unique card identifier and can not be set manually, but is set automatically upon addition of the card.

Sold field simply represents if the card is sold or not. Card that have not yet been set as sold can not be used, in other words, they are disabled.

There is also a checkbox beside every card. By ticking 1 or more cards, print cards field appears, allowing you to print selected cards. Software uses default browser print option engine and opens up a new window to print the cards.

Any of the listed cards can be modified by accessing Card edit section, which can be done by clicking on id or username of the card.

More about Editing cards in the following section.

5.3. Editing/deleting existing cards

In previous section we have explained how to open Card editing screen. It is almost identical to Card creating screen, in other words it allows you to edit any information just as if you are creating it for the first time, with addition of the following options:

- Disconnect card
- Clear sessions
- Delete
- Print
- Sell/enable
- Update

These options are mostly self explanatory or have been described in Users editing section of this manual.

Sell/enable button lets you sell this card, so it becomes active and lets customer use it. In order to sell the card, following fields become mandatory:

If Client type is a Physical entity:

- First name
- Last (family) name
- Personal ID

If Client type is a Company:

- Company name
- JIB
- PIB

By *Selling/Enabling* the card, an invoice is generated which can be found by clicking View invoice created in notification that appears, or by navigating to Financials->List card invoices.

Card price and invoice generated is based on the *Card group* assigned to the card. In the next section of this manual we will explain *Card groups*, and how to use them.

6. Card groups

Card groups are similar to *Groups*, as explained in Cards section. Main difference is there expiration mechanism.

While Group expiration date is determined the moment its assigned to user queue, *Card groups* have no expiration date, but are being spent as the customer is spending its time online.

As such, Cards can not have queued Card groups, since there is no definitive expiration date.

All Pro Radius Manager versions have unlimited Card groups allowed, and they can be defined through Cards->New Card Group screen, which will be explained by the next section.

6.1. Creating card groups

Since Groups have been explained in section 3.1. Creating groups, this chapter will only explain differences when creating Card groups.

Card groups have Period, as opposed to *Unit period* in *Groups*. *Period* defines how much Seconds, Minutes, Hours or Days will the *Card* be active. This means that the period is only being spent as the user is online, a that no final expiration date is set.

6.2. List card groups

All created Card groups can be listed by navigating to Cards->List Card Groups.

This screen, similar to List Groups screen, lists all Card groups and lets you see basic information about them as well as sort them the way you want.

Following parameters are displayed:

- Card group name
- Rate limit
- Traffic limit
- Exceed rate limit
- Price
- Cards

Cards represents a number of sold/enabled cards that have currently applied this group to them.

The rest of the parameters are self explanatory or have been explained in list List Card section.

To edit any of the listed card groups, click on the *Card group name* you want to edit.

6.3. Editing/deleting existing card groups

Card groups screen look the same as if you are creating Card group for the first time, with few additional buttons:

- Delete
- Transfer

Delete is permanent, and can not be undone once you confirm it, so be careful when you are managing your card groups.

Transfer also can not be undone, and it is used tio transfer Cards to another Card groups if there are any available.

7. Managers

In this section we wil be explaining what are managers and how they work on Pro Radius Manager.

Managers are accounts that have some or all permissions to access Pro Radius Manager and manage every aspect of it.

By default admin manager account is created and once logged in, you can add other managers and change your own.

7.1. Creating managers

Managers are created through Managers->New manager screen.

Here are manager attributes that we are going to cover:

- Enable manager
- Manager name
- Password
- Regions allowed
- Manager group

Enable manager is a checkbox which is by default checked and regulates weather the newly created user automaticlly enabled or not.

Manager name is unique identifier of manager and is used as user name when loging in to Pro Radius Manager.

Password is used when loging in to Pro Radius Manager. *Password* and *Re-type password* fields should be identical when entering new manager. Be sure to remember the password when entering, specialy for admin account because it can't be read, only changed through Edit manager screen.

Regions allowed represent permission to manager users that have selected regions assigned to them. You can check *All regions allowed* or uncheck it to see a list of all available regions.

Manager group is a predefined managers group that holds a certain permissions. By assigning a manager group to manager, you add that permissions to that manager. By default you only have *Administrator* manager group, but it is highly recomended that you have several manager groups. More on manager groups on Manager groups section of this manual.

As you select manager group, you can see permissions that manager will have with that group.

7.2. List managers

All defined manager can be listed at Managers->List managers screen.

It displays managers along with their assigned groups with links to both managers and manager groups. Through this screen you can access managers in order to edit them.

Notice that on the list of managers, Id has a colored background. This represents a current state of manager. Green if its enabled, red if its disabled. You can use this to see directly from the list which managers are active and which are not.

7.3. Editing/deleting existing managers

As mentioned in previous section, you can access manager editing screen through List managers by clicking on a desired manager.

This section alowes you to change all information entered on manager creation screen with few additional options:

- Enable/disable manager
- Transfer
- Delete

Enable manager checkbox enables or disables manager by checking or unchecking. Disabled managers will not be able to log in and therefor make any changes.

Transfer in this section is used to transfer all manager related binds to another manager and it is not reversable. It is highly recomended that you carefully select this option, as all of the invoices, groups added and entire history of this manager will be changed to selected manager, all except system logs.

Delete removes this manager and is allowed only if manager is not related to any user management, invoices or any type of relevant data. If you still need to delete a manager, make sure you transfer to another manager and that delete, or simply use *Transfer and Delete* button when prompt.

Tip: We recomend that you NEVER Delete or Transfer managers if it has a history of invoicing and user managing behind him, as it will be removed or transfered, and you wont be able to have a correct history recorded. Instead deleting, use Enable/Disable mechanisam.

8. Manager groups

Earlier we mentioned Manager groups when we refered to permissions, and that is exactly what Manager groups do: they group predefined permission settings so they can be easily assigned to any desired manager.

You can have unlimited number of manager groups.

In the next sections we will explain creating, listing and editing/deleting manager groups.

8.1. Creating manager groups

Manager groups are created through Managers->New manager group screen. In this section we will explain all of the Manager group attributes but may leave out some self-explanatory permissions.

Manager group name is a unique field and identifier for the manager group and it is mandatory field.

Here are a full list of permissions that you can define:
Users:
- New user
- View user
- List users
- Find users
- Edit user
- Delete user

Users queues:
- Add active period
- Edit active queue manualy
- Remove active queues
- Add periods in queue
- Remove queues

Regions:
- New region
- View region
- List regions
- Edit region
- Delete region
- Transfer region users

Groups:
- New group
- View group
- List groups
- Edit group
- Delete group
- Transfer group members

Managers:
- New manager
- View manager
- List managers
- Edit manager
- Delete manager
- Transfer responsability

Manager groups:
- New manager group
- View manager group
- List manager groups
- Edit manager group
- Delete manager group
- Transfer manager group members

NASes:
- New NAS
- View NAS
- List NAS-es
- Edit NAS
- Delete NAS

Taxes:
- New tax
- View tax
- List taxes
- Edit tax
- Delete tax

Invoices:
- View invoice
- List invoices
- Delete invoice

Reports:
- View system logs

Special:
- Manage all users
- Start radius service
- Stop radius service
- Restart radius service

There are a lot of similar rules regarding permission mechanics so let us take a look how permissions work on Pro Radius Manager.

New user, region, group, manager, manager group, NAS and *tax* when enabled, give permission to create new user, region, group, manager, manager group, NAS and tax

respectively. However, in order to open up a creation screen you need to have *View user, region, group, manager, manager group, NAS* and *tax* enabled, also respectively.

View user, region, group, manager, manager group, NAS, tax and *invoice* also enables opening Edit user, region, group, manager, manager group, NAS and tax screens, as well as View invoice screen. Remember, it only allows opening of the screen, in order to be allowed to edit you need to have *Edit user, region, group, manager, manager group, NAS* and *tax* enabled.

View system logs allows you to view logs of every action on Pro Radius Manager.

List user, region, group, manager, manager group, NAS, tax and *invoice* permits listing of users, regions, groups, managers, manager groups, NASes, taxes and invoices. You can also use *Find user* for enabling Users->Find users screen.

For example, if you wanted to create spectator manager on Pro Radius Manager that is only able to see users, but can't change or in any way affect them, than all you need to do is enbale *View user* and *List* or *Find users* permission.

Delete user, region, group, manager, manager group, NAS, tax and invoice enables deleting of users, regions, groups, managers, manager groups, NASes, taxes and invoices. Note that some sections, like Groups, will may not be available for delete until transfer is made to another group, as we mentioned before in Editing/deleting existing groups section of this manual.

To allow manager to transfer regions, groups, managers, manager groups and taxes you need to enable *Transfer region, group, manager, manager group* and *tax* option.

User queue permissions specificly refer to adding and removing groups to users.

Add active period permission lets tou add periods of groups to user that currently do not have any groups active. *Add periods in queue* also allows you to add periods of groups but in queue, so they would execute when current group period expires.

Edit active queue manualy alowes you to edit currently active period on a user.

Remove active queues when enabled allows manager to remove active periods from users.

Remove queues is same as *Remove active queues* but only allows to remove periods in queue instead of active periods.

Start radius service, Stop radius service and *Restart radius service* allows manager to start, stop and restart radius service on Pro Radius manager. It is recomended that you only allow this option to technical staff.

8.2. List manager groups

In order to list manager groups you can open screen through Managers->List manager groups.

It lists all existing manager groups along with a number of managers currently using each of the group. By clicking on Manager group name you can open up an editing screen of desired manager group.

In the next section of this manual we will see how we can edit manager groups.

8.3. Editing/deleting existing manager groups

In previous section we explained how to open up editing screen for manager groups on Pro Radius Manager.

Editing screen is very similar to creation screen for manager groups with additional Delete and Transfer buttons.

Delete and *Transfer* work exactly like in previous sections. Delete can only be achived when there are no managers currently using this manager group. If that is the case, in order to make it deletable you can transfer managers to diferent manager group. Have in mind that by transfering manager to different manager group it automaticly receives permission settings of that group.

Tip: If manager group is used by manager, trieing to delete it will automaticly prompt you to transfer and delete, completing both actions in one click.

9. NASes

A network access server (NAS) is a single point of access to a remote resource. You can have one or more NAS devices defined depending on the licence you own. Pro Radius Manager supports 2 types of NASes:

- Mikrotik
- CMTS

All existing NASes can be assigned to a user and by doing so Pro Radius Manager will automaticly recognise that users MAC address and check for its parameters.

More on adding, listing and deleting NASes in next sections.

9.1. Creating NASes

You can add NASes through NAS->New NAS screen.

Main use in defining the NASes from your network is keeping track of your expanding network and being able to check user parameters on Edit user screen without leaving Pro Radius Manager and checking it manualy.

As we mentioned there are 2 types of NASes: Mikrotik and CMTS. Both of them require that you fill *NAS IP* and *NAS name* fields.

Also, both of them are mandatory fields and are unique.

If Mikrotik *NAS type* is selected you have option *Enable API service* to enable by checking its checkbox on and adding *API username* and *API password*. For Pro Radius Manager to be able to read user parameters and connect to NAS you must also enable API in Mikrotik and provide correct parameters to Pro Radius Manager.

In case you need to create cable user and select CMTS *NAS type,* you are required to enter username and password so Pro Radius Manager could connect to that NAS and read parameters.

9.2. List NASes

Listing all available NASes can be dont through NAS->List NASes screen.

NAS listings offer following information:

- NAS name
- NAS IP
- API enabled

By clicking on desired *NAS name* you can open up editing/deleting screen for that NAS. More detailed in the next section of this manual.

9.3. Editing/deleting existing NASes

In previous section we explained how to open editing screen for NASes.

Editing screen containes all elements as creation screen with additional *Delete NAS* button.

When deleting NAS have in mind that NASes that are already assigned to some users will not be available for deletion.

10. Financials

Financial section of Pro Radius Manager consists of automaticly generated invoices by adding groups to users. You can review those invoices and print them as well as set up a tax values.

In the following sections we will explain how to filter invoices and rewiev them, as well as creating, listing and deleting taxes.

10.1. Invoicing

Invoices on Pro Radius Manager are generated automaticly through Edit user screen by adding group with a price to user.

When you add a group, invoice info is populated using user info, entered group quantity and group info. Also, invoice number and year of addition is generated automatically.

Depending on all information invoices can be listed, filtered and printed. More detailed about each of this sections in next chapter of this manual.

10.1.1. List user/card invoices

Ivoice listing can be accessed through Financials->List User Invoices or Financials->List Card Invoices, depending on what invoice do you want to list.

By using diferent filters available in this section, you are able to display and find desired invoice listings as well as summarize them in order to get certain statistics.

Here is a full list of available filters:

- Filter by date issued
- Filter by invoice number
- Filter by manager
- Filter by region
- Filter by client/card
- Filter by group/card group

Checking *Filter by date issued* opens up an *Date from* and *Date to* fields, allowing us to ender invoice issuing date range for which we want to list the invoices.

Filter by invoice number filters invoices by their number in range you define in fields *From number* and *To number*. Invoice numbers at Pro Radius manager are automatically generated by combining first available number, character "/" and a year of issuing, however when filtering you are only entering number.

Filter by manager offers you a list of managers available to filter invoices by manager that has generated them.

Filter by region is used to filter invoices by region currently assigned to user.

Filter by client/card can be done by entering client/card number in *Client ID* field. Client(user) ID can be fount in edit user/card section as User ID/Card ID. User ID/Card ID is automatically generated when you create user/card and is not manually editable.

Filter by group/card group fiters invoices by group/card group that has been charged to user on it.

Beside filtering it is possible to summarize all filtered invoices by checking Summarize checkbox. By doing so 2 additional checkboxes appear: *By group/card group* and *By manager*.

10.1. Invoicing / list invoices

Checking one or both of this categories summarizes invoices by that particular categorie and allowes you to statisticly see which group has been sold the most or which manager has generated the most invoices and income.

The invoice list displays the following fields:

- Date
- Invoice No.
- Manager
- Client ID
- Group
- Price
- Tax
- Price+Tax

To view, print or delete any of these invoices click on the desired Invoice Number. After the view screen is opened you can check detailed info on that invoice. All about this screen in next section.

10.1.2. View/print/delete invoices

In previous section we have explained how you can access invoice in order to view, print or delete it.

View Invoice screen is divided in 2 sections: *Basic info* and *Items*.

Basic info contains basic information about user associated with this invoice as well as date of issuing and period assigned by group.

Here is a full list of info displayed:

- Invoice number
- Client ID
- Client name
- Date issued
- Period of delivery -> from
- Period of delivery -> to

Items section displays invoice items, or in our case group that has been assigned to the user with its quantity and price. It also displays tax info. Full list of item info is listed bellow:

- Item id
- Description
- Unit of measure
- Quantity
- Price
- Tax value
- Value-Tax
- Tax
- Value+Tax

In order to Delete and Print invoice use the buttons on a bottom of this screen.

Note that Delete button is only available on the last invoice created and only on invoices issued today, meaning that you can only delete invoices created today and by mistake. This is due to security and continuity of system.

Print invoice opens up a pop-up window to print out desired invoice. Be sure to check if you

browser is blocking a pop-up windows to make an exception.

10.2. Taxes

Taxes section of Pro Radius Manager allowes you to create, edti and delete any tax type. Taxes are connected to group section and are calculated when automatically generating invoices.

All about tax types and values in next sections of this manual.

10.2.1. Creating taxes

Taxes are created through Financials->New tax screen.

When creating taxes you are required to fill out 3 fields:

- Tax name
- Tax value
- Tax type

Tax name is a unique identifier and therefor can not be multiple same entries.

Tax value represents a value of particular tax and is connected to tax type since it varies from fixed value to percentage value. Tax value is calculated for each group during creation or editing and during invoice creation. Changing tax value or type will not affect already generated invoices but only future ones.

10.2.2. List taxes

To list all existing taxes enter screen through Financials->List taxes.

Here you can see all available taxes. Screen lists all available attributes: Tax name, Tax value and Tax type.

By clicking on desired Tax name you can enter Tax editing screen which we will explain in next section of this manual.

10.2.3. Editing/deleting existing taxes

In previous section we explained how to access tax editing/deleting screen.

This screen has 2 additional buttons compared to New tax screen:

- Delete
- Transfer

Delete button deletes that tax. It is only available if there aren't any groups currently using that tax otherwise it will propt you to transfer groups currently using this group to another tax.

Transfer button transfers groups currently using that tax to another available tax. Note that by transfering group to another tax with different value or type, you do NOT affect a price of that group, you only change a price without tax which will be automatically calculated based on tax value and type.

Editing existing taxes will not affect already generated invoices. It will only affect invoices created after the update has been made. Invoices generated before record value of tax active at the time being and that can not be changed.

In the next section of this manual we will see how reports work and what do they record on Pro Radius Manager.

11. Reports

Reports section is accessed through Reports->System logs.

Whenever a manager logs in, adds new user, edits a user, adds a group to it, changes a tax, group, region, manager or makes any sort of action, it is recorded in system logs. This section allowes you to display history of all actions that occured on Pro Radius Manager. Due to large amount of logs, in order to get the desired logs you can use a certain combination of filters.

Here is a list of all available filters:

- Filter by date
- Filter by remote IP
- Filter by manager
- Filter by info

Filter by date alowes you to filter logs by the date that action took place. It is commonly used filter and great for keeping track of daily activities on Pro Radius Manager.

Filter by remote IP filters logs to display only actions received from entered remote IP address. It can be used to display only actions from a certain PC or location.

Filter by manager does exactly that, filters certain manager actions. It is usefull for getting given manager daily logs in combination with other filters.

Filter by info is a specific filter in sense that it logs can contain different type of info stored in this field. For example, if the log is about updating, deleting or creating user, info field will contain user username or MAC address depending on type of the user. If the log is about group it will display name of a group, if it is about region a name of a regio will be displayed and so on and so forth.

When you are ready to display results click the *Apply filter* button at the bottom of the filter section.

Filtered results are by default sorted by date and time, and have following information provided for each log:

- Date and Time
- Ip

11. Reports

- Manager
- Event
- Info
- Expiration
- Comment

We have explained some of these properties, but not all. Event column holds the info descibing an action that has been loged, wether it is a manager login or user update.

Comment holds the current comment on a user but only if the log is about some sort of change related to user: new user, edit user, delete user, add period to user...ect.

10. Contact

Any information regarding Pro Radius Manager that are not covered by this manual can be found at F.A.Q. section of our official web page (http://proradiusmanager.com) or you can contact us directly through contact form and our team will respond as soon as possible.

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