

Disconnecting Active RADIUS Users

Introduction


- The RADIUS protocol uses UDP to communicate between the client and the server.
- The client initiates all communication and the server simply replies.
- There are however times when the need arise for the server to initiate communication to the client.
- A typical example will be when there is a need to disconnect an active user.
- Since January 2023 RADIUSdesk introduced an update that will allow you do send disconnect requests to RADIUS Clients in order to disconnect active users.

Some technical information

- In order for the RADIUS server to communicate with the RADIUS Client we need determine two things.
 - The type of client.
 - The type of client in turn will determine how we will communicate with the RADIUS Client.
- We currently support two types of clients.
 - CoovaChilli (Used by MESHdesk and APdesk)
 - Mikrotik
- In the rest of the document we will discuss how the RADIUSdesk system communicate with these two types of clients.
- We will also take a look where to make changes in order to add support for additional types of RADIUS Clients.

CoovaChilli on MESHdesk and APdesk

- MESHdesk and APdesk automatically adds an associated RADIUS Client when adding a Captive Portal exit point.
- This RADIUS Client will have the type of **Coova-On-Meshdesk**.



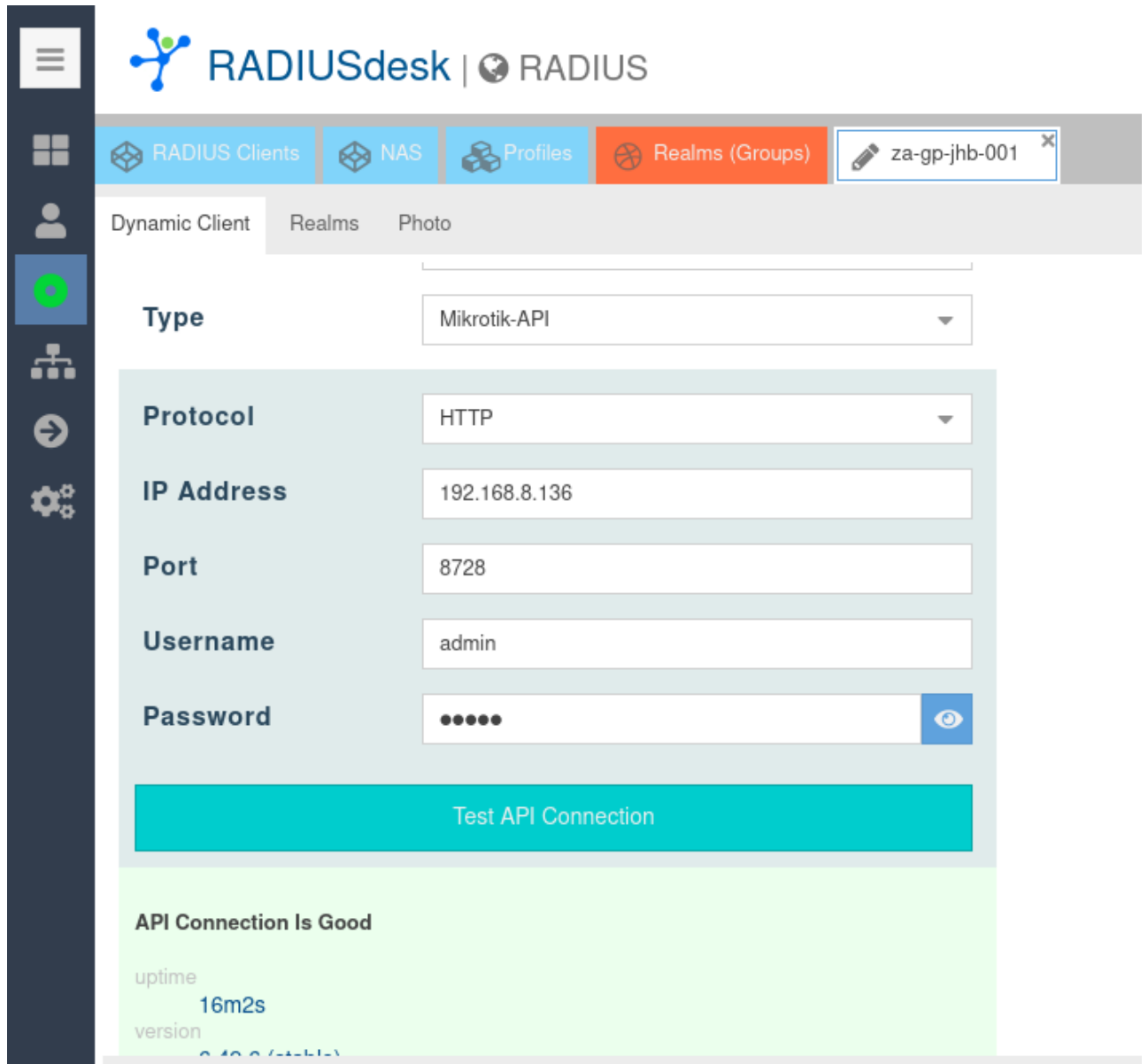
The screenshot shows the RADIUSdesk web interface. The top navigation bar includes the RADIUSdesk logo and the text "RADIUSdesk | RADIUS". Below the navigation bar, there are several tabs: "RADIUS Clients", "NAS", "Profiles", "Realms (Groups)", "za-gp-jhb-001", and "MESHdesk_Dev-2_mcp_42". The "Realms (Groups)" tab is currently selected. Underneath, there are sub-tabs for "Dynamic Client", "Realms", and "Photo". The "General" tab is active, showing the configuration for a RADIUS Client. The fields are as follows:

Field	Value
Name	MESHdesk_Dev-2_mcp_42
NAS-Identifier	mcp_42
Called-Station-Id	
Type	Coova-On-Meshdesk

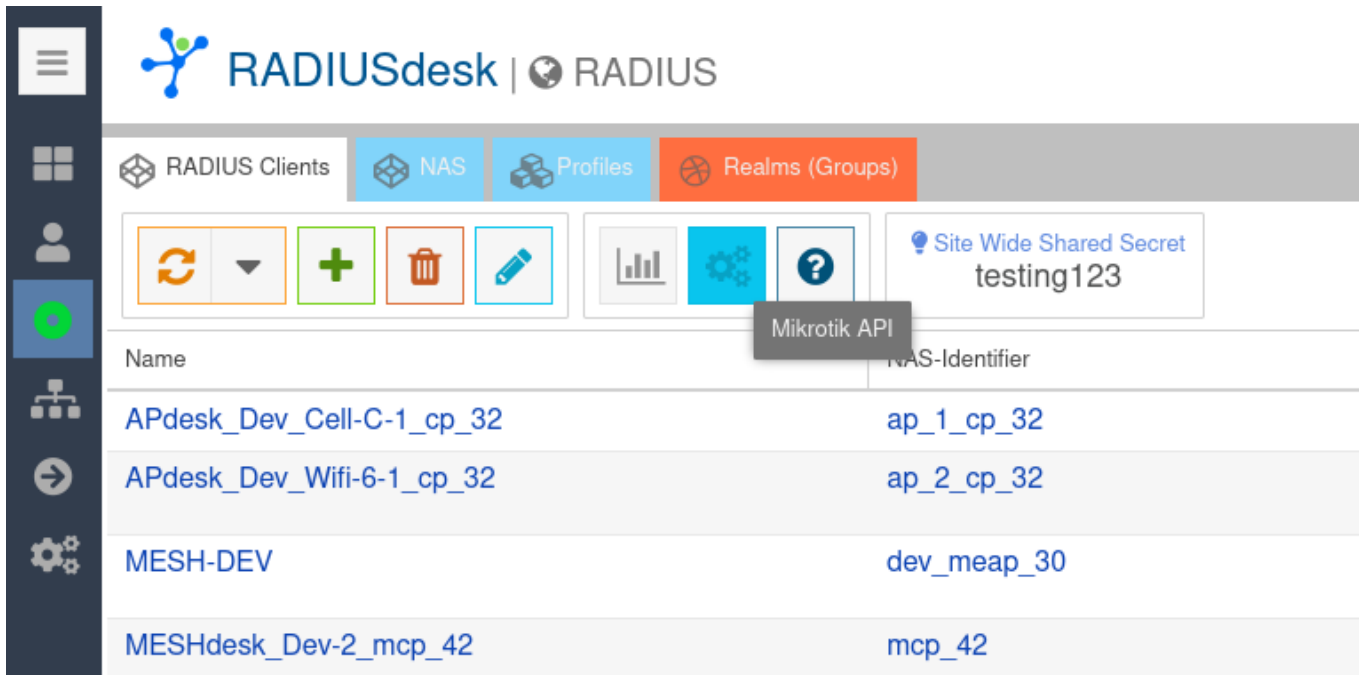
- Disconnecting a user will then utilize the `/var/www/rdcore/cake4/rd_cake/src/Controller/Component/KickerComponent.php` component to contact the AP with instructions to disconnect the user.
- When the MQTT mechanism is implemented disconnecting will be in real-time.
- Without the MQTT mechanism disconnecting a user will take up to one minute.
- The disconnect command used on CoovaChilli will be **chilli_query logout mac <MAC Address>**

Mikrotik

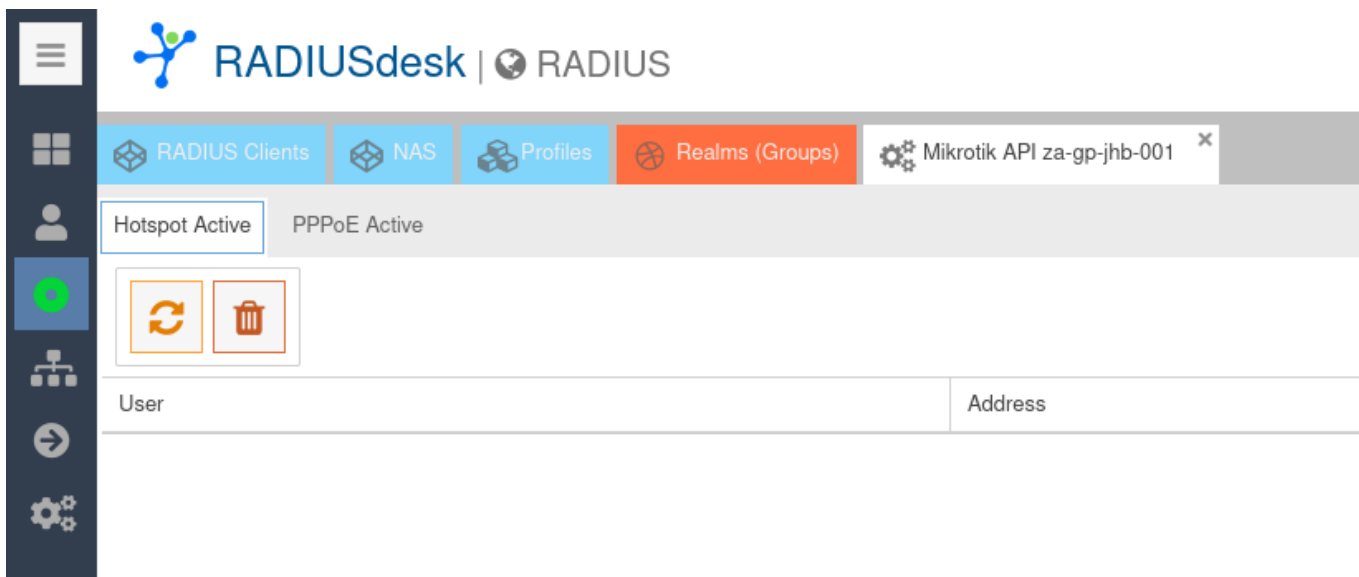
- With the Mikrotik RADIUS Clients we make use of the **RouterOS API Client** to communicate with the Mikrotik. (<https://github.com/EvilFreelancer/routeros-api-php>)
- This library is already included with RADIUSdesk.
- Many times there will be a NAT connection between the Mikrotik and the RADIUSdesk server preventing the server to reach the Mikrotik directly.
- Mikrotik fortunately supports a large amount of VPN technologies which you can choose from.
- <https://help.mikrotik.com/docs/display/ROS/Virtual+Private+Networks>
- If needed, please select one of your choosing. Setting them up is well documented in the Mikrotik documentation in the link above.
- When adding a RADIUS Client and selecting the **Mikrotik-API** type you will be presented with a dialog to supply the detail for the API connection to the Mikrotik.



- There is also a **Test API Connection** button which allows you to confirm that the API communication to the Mikrotik is indeed working.
- In the screenshot above you can see part of the reply from the Mikrotik indicating that the communication via the API is established and good.
- We also added a Mikrotik API button to the toolbar for RADIUS Clients.



- The button is disabled by default and becomes enabled when you select a RADIUS Client of type **Mikrotik-API**.
- Selecting it will open a new tab with two sub-tabs. One listing active **Hotspot** users and the other listing active **PPPoE** users.
- You can select and disconnect listed users in those sub-tabs.



Add Support for additional types

- This section is a technical section for those who wants to introduce new RADIUS Client types.
- The list in the drop-down is specified in the following file:
/var/www/rdcore/cake4/rd_cake/config/RadiusDesk.php

```
//Define nas types
$config['nas_types'][0] = ['name' => 'Other', 'id' => 'other', 'active' => true];
$config['nas_types'][1] = ['name' => 'Coova-On-Meshdesk', 'id' => 'CoovaMeshdesk', 'active' => true];
```

```
$config['nas_types'][2] = ['name' => 'Mikrotik-API', 'id' => 'Mikrotik-API', 'active' => true];
```

- Then when selecting an active user in **Activity Monitor** to disconnect behind the scenes the code will determine the type of RADIUS Client based on the **nasidentifier** field. (This is in the radacct table and has to match the value in the dynamic-clients table)
- This all happens inside the `/var/www/rdcore/cake4/rd_cake/src/Controller/Component/KickerComponent.php` file.
- Thus adding support for additional types will involve adding additional sections to the PHP code.
- See the snippet below.

```
//First we try to locate the client under dynamic_clients
$dc = $this->DynamicClients->find()
    ->where(['DynamicClients.nasidentifier' => $nasidentifier])
    ->contain(['DynamicClientSettings'])
    ->first();

if($dc){
    //===CoovaMeshdesk===
    if($dc->type == $this->coova_md){ //It is type CoovaMeshdesk => Now try
and locate AP to send command to

        //We have a convention of nasidentifier for meshdesk =>
mcp_<captive_portal_id> and apdesk => ap_<ap id>_cp_<captive_portal_id>
        if(preg_match('/^mcp_/' , $nasidentifier)){ //MESHdesk
            $this->kickMeshNodeUser($sent, $dc->cloud_id, $token);
        }

        if(preg_match('/^ap_/' , $nasidentifier)){ //APdesk
            $this->kickApUser($sent, $dc->cloud_id, $token);
        }
        sleep(1); //Give MQTT time to do its thing...
    }

    //===Mikrotik-API===
```

- That's the only things involved in disconnecting an active RADIUS user.
- The FUP implementation also utilizes this mechanism so this also serve as a core component for the FUP implementation to be successful.

From:
<http://www.radiusdesk.com/wiki/> - **RADIUSdesk**

Permanent link:
http://www.radiusdesk.com/wiki/radiusdesk/radius_clients/disconnect

Last update: **2023/01/03 08:25**

