



Build Mikrotik Wireless Hotspot with User Manager as RADIUS Server

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**MIKROTIK USER MEETING CAMEROON
26 Janvier 2018, HOTEL DJEUGA PALACE**

A propos de moi

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- Ingenieur MIAGE
- CEO of KMP SOLUTIONS CONSULTING
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- Mikrotik Certified Consultant
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A propos de nous



- **Entreprise de Service du Numérique (ESN)**
- Intégrateur de solutions a forte valeur ajoutée
- Solutions sans fils, Hotspot WIFI, Boucle Locale Radio
- Interconnexion des sites par liaison VPN, BLR et fibre optique
- Intégration de solutions de Cloud Computing en mode SAAS et PAAS
- Solutions de vidéosurveillance, contrôle d'accès et biométrie
- Solutions de téléphonie d'entreprise
- Solutions de sécurisation et d'optimisation des réseaux informatiques
- Formations, Séminaires et certifications



HOTSPOT WIFI : C'est quoi?



Hotspot WIFI

- Borne WIFI ou point d'accès WIFI donnant accès a un réseau sans fil Wi-Fi.
- Permet aux utilisateurs de PC portables, telephones mobiles, tablettes, ou smartphones de se connecter à internet.
- Les Utilisateurs doivent s'authentifier via un page web (Portail captif)

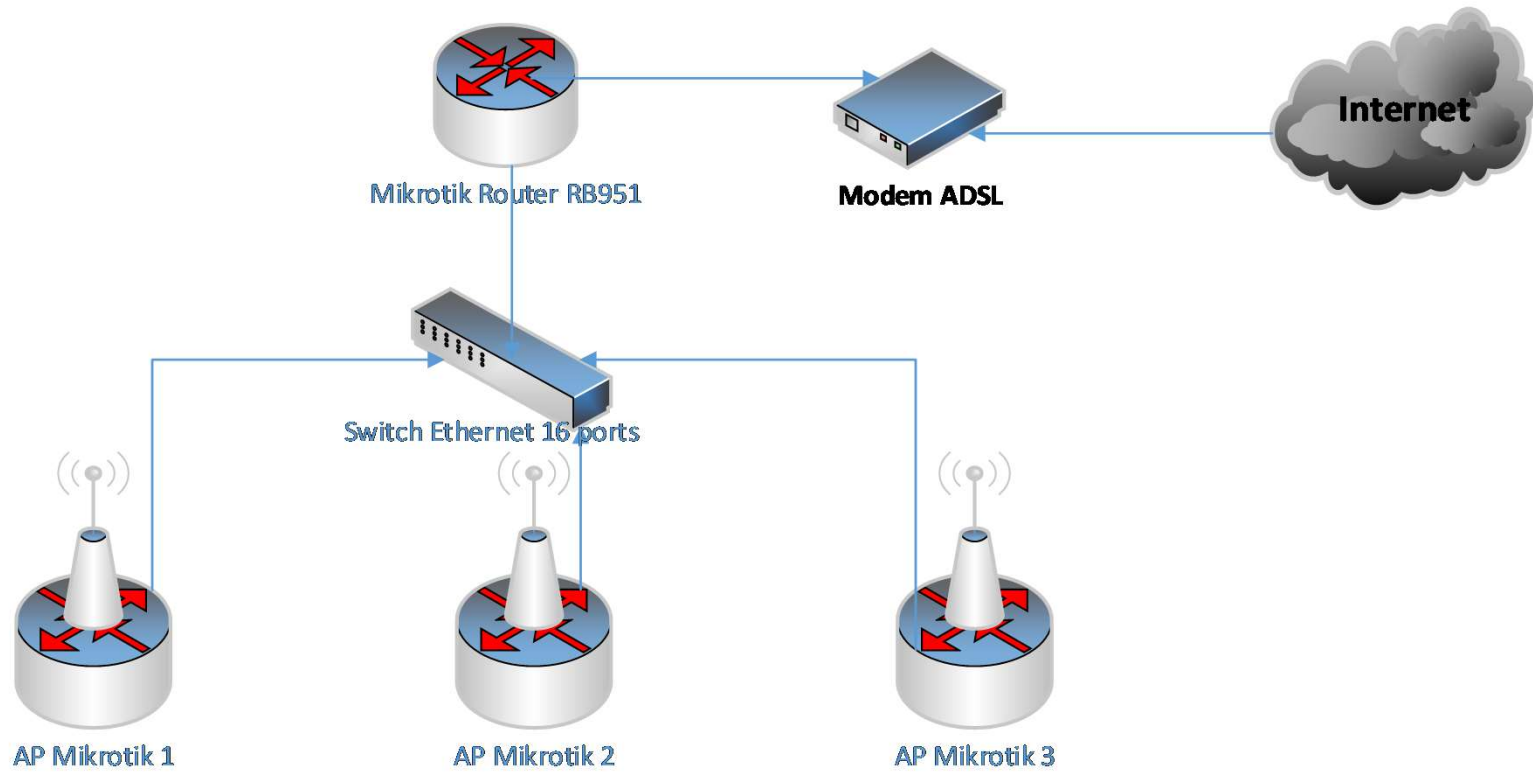
Mikrotik Hotspot

- Il s'agit d'un outil intégré du RouterOs utilisé pour un accès Internet instantané Plug-and-Play
- HotSpot est un moyen d'autoriser les utilisateurs à accéder à certaines ressources réseau, mais ne fournit pas le cryptage du trafic.
- Il fournit également une journalisation flexible des utilisateurs.
- Différents moyens d'autorisation.

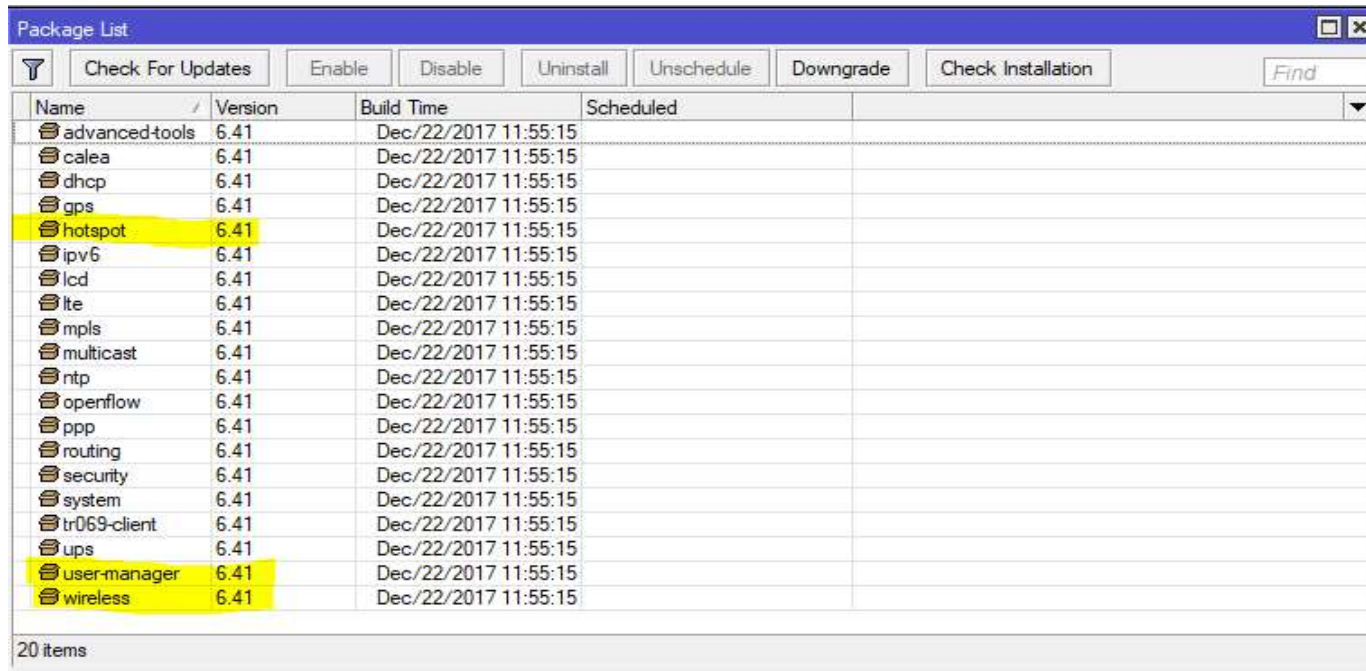
Lieu?

- Entreprises, Cybercafés, Aéroports
- Hôtel, restaurant, café
- Boutiques, Supermarchés
- Parcs, Espaces publiques
- Hôpitaux, Hotspot municipal ...

Architecture



Prérequis



Package List

Check For Updates Enable Disable Uninstall Unschedule Downgrade Check Installation Find

Name	Version	Build Time	Scheduled
advanced-tools	6.41	Dec/22/2017 11:55:15	
calea	6.41	Dec/22/2017 11:55:15	
dhcp	6.41	Dec/22/2017 11:55:15	
gps	6.41	Dec/22/2017 11:55:15	
hotspot	6.41	Dec/22/2017 11:55:15	
ipv6	6.41	Dec/22/2017 11:55:15	
lcd	6.41	Dec/22/2017 11:55:15	
lte	6.41	Dec/22/2017 11:55:15	
mpls	6.41	Dec/22/2017 11:55:15	
multicast	6.41	Dec/22/2017 11:55:15	
ntp	6.41	Dec/22/2017 11:55:15	
openflow	6.41	Dec/22/2017 11:55:15	
ppp	6.41	Dec/22/2017 11:55:15	
routing	6.41	Dec/22/2017 11:55:15	
security	6.41	Dec/22/2017 11:55:15	
system	6.41	Dec/22/2017 11:55:15	
tr069-client	6.41	Dec/22/2017 11:55:15	
ups	6.41	Dec/22/2017 11:55:15	
user-manager	6.41	Dec/22/2017 11:55:15	
wireless	6.41	Dec/22/2017 11:55:15	

20 items

- Hotspot
- User-manager
- Wireless

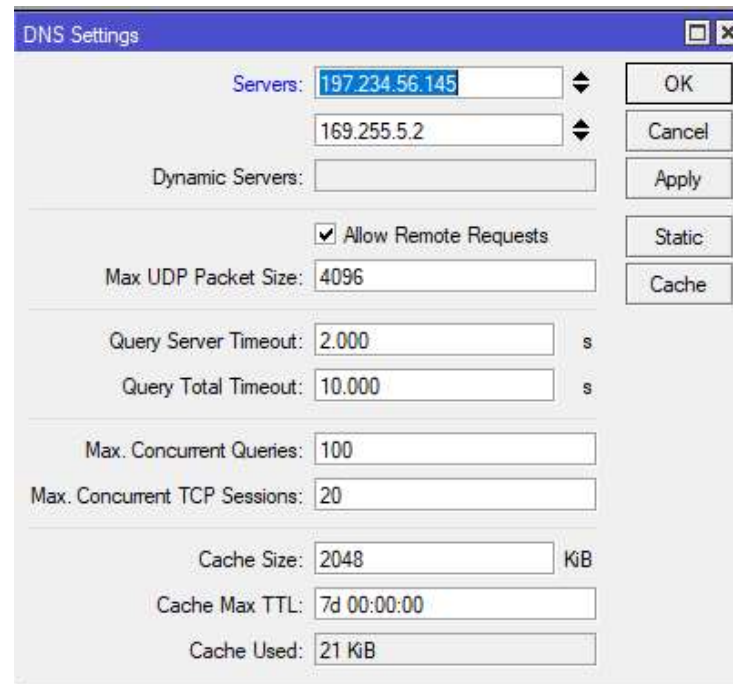
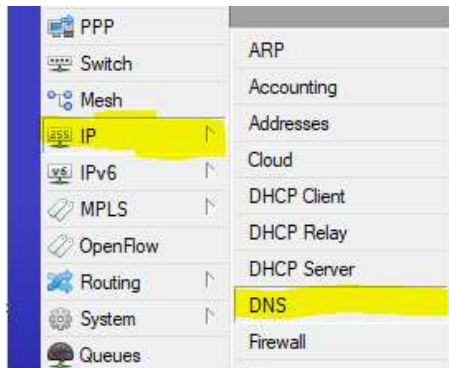
Prérequis

- RouterBoards
- Adresses IP valides sur les interfaces Internet et Locales
- Adresses DNS de votre FAI a ajouter sur IP – DNS
- Au moins 01 Hotspot User



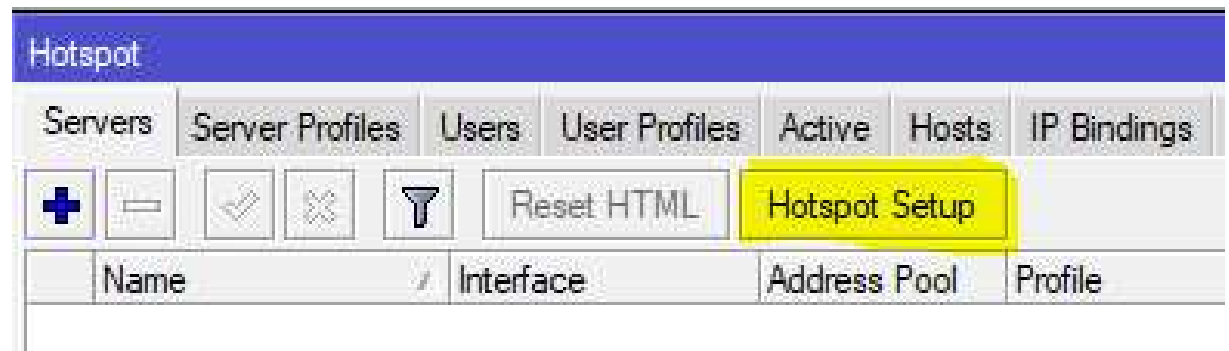
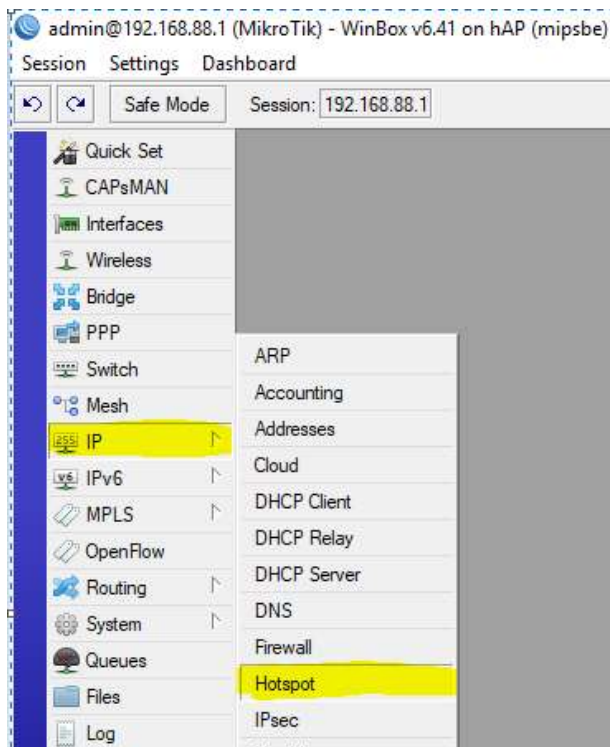
HotSpot Configuration

- Configuration DNS

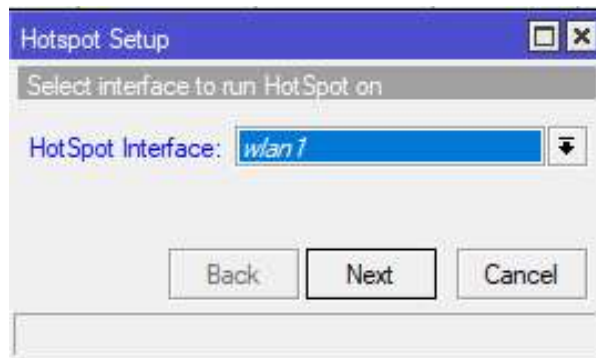


HotSpot Configuration

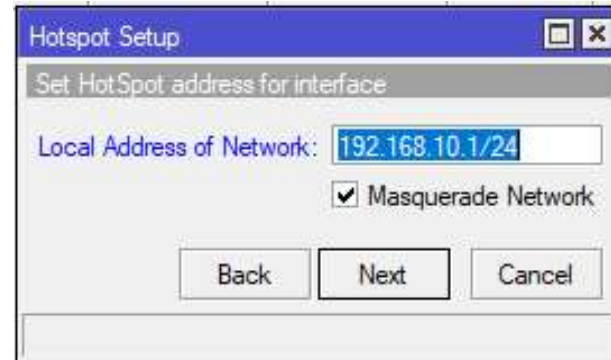
- Configuration Hotspot est similaire à celle du DHCP SERVER



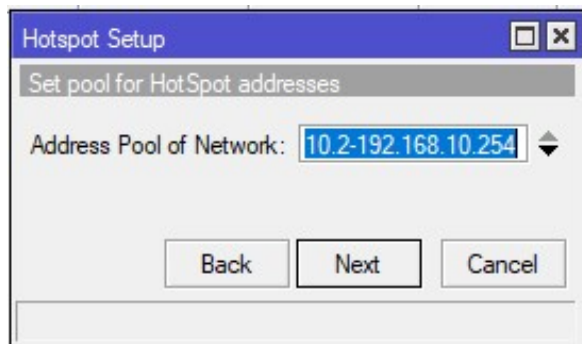
HotSpot Configuration



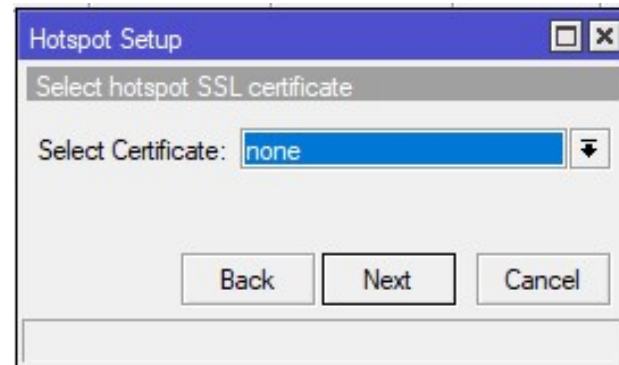
1. Sélectionner l'interface ou deployer le Hotspot



2. L'adresse de l'interface est ajouter automatiquement

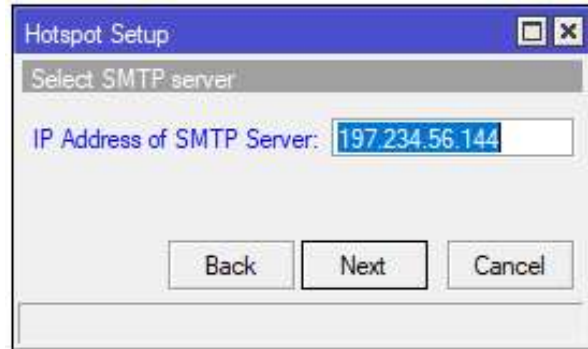


3. Définir votre plage d'adresse

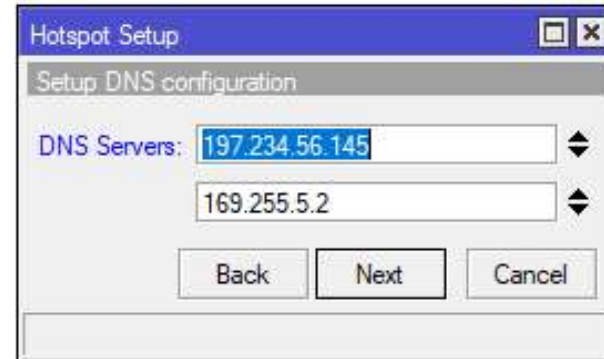


4. Faut-il utiliser le certificat ensemble avec HotSpot ou non?

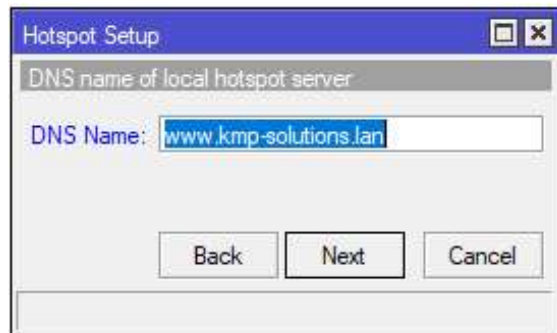
HotSpot Configuration



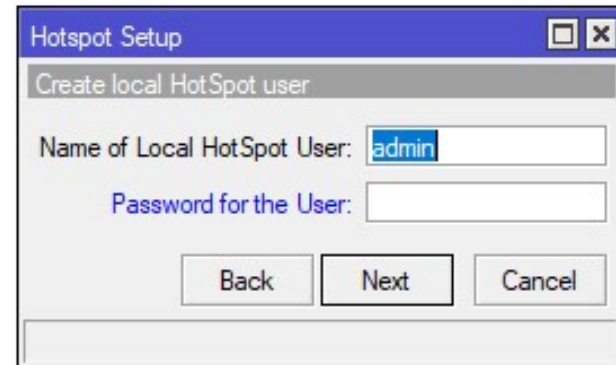
1. IP du serveur SMTP pour recevoir les arletes



2. Insérer les Serveurs DNS a utiliser ou IP du routeur



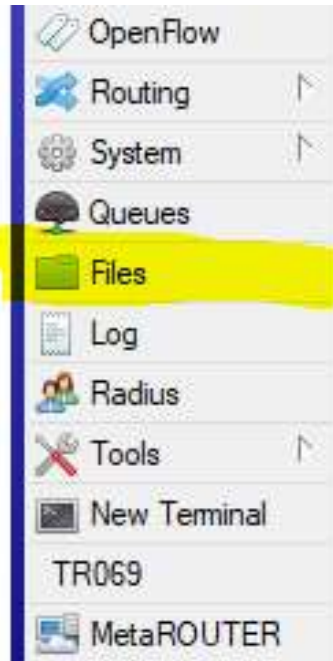
3. Nom de domaine DNS pour le Hotspot server



4. Ajouter le 1^{er} user Hotspot

HotSpot Configuration

- **Personnalisation du portail captif**



The 'File List' window displays a directory tree for a flash drive. The root is 'flash' (disk), which contains a sub-directory 'flash/KMP MUM'. This sub-directory contains several files and sub-directories, including 'alogin.html', 'error.html', 'errors.txt', an 'img' sub-directory with various image files, and 'login.html' and 'logout.html'.

File Name	Type	Size	Creation Time
flash	disk		Jan/01/1970
flash/KMP MUM	directory		Jan/01/2002 01:14:26
flash/KMP MUM/allogin.html	.html file	1392 B	Jan/01/2002 01:14:26
flash/KMP MUM/error.html	.html file	985 B	Jan/01/2002 01:14:26
flash/KMP MUM/errors.txt	.txt file	3615 B	Jan/01/2002 01:14:26
flash/KMP MUM/img	directory		Jan/01/2002 01:14:26
flash/KMP MUM/img/bg-...	.png file	897.8 KiB	Jan/01/2002 01:14:41
flash/KMP MUM/img/bg-...	.png file	400.0 KiB	Jan/01/2002 01:14:48
flash/KMP MUM/img/bg.ai	.ai file	0 B	Jan/01/2002 01:14:49
flash/KMP MUM/img/bg.j...	.jpg file	0 B	Jan/01/2002 01:14:49
flash/KMP MUM/img/foo...	.ai file	0 B	Jan/01/2002 01:14:49
flash/KMP MUM/img/foo...	.png file	0 B	Jan/01/2002 01:14:49
flash/KMP MUM/login.html	.html file	0 B	Jan/01/2002 01:14:49
flash/KMP MUM/logout.html	.html file	0 B	Jan/01/2002 01:14:49
flash/KMP MUM/iv	directory		Jan/01/2002 01:14:26

67 items | 16.0 MiB of 16.0 MiB used | 0% free

HotSpot Configuration

The screenshot displays the 'Hotspot' management interface. The 'Server Profiles' tab is active, showing a list of profiles. The 'hsprof1' profile is selected, and its configuration is shown in the 'Hotspot Server Profile <hsprof1>' dialog box. The 'RADIUS' tab is selected, and a dropdown menu is open for the 'HTML Directory' field, showing several options. The 'flash/KMP MUM' option is highlighted in green.

Hotspot Server Profile <hsprof1>

General | Login | RADIUS

Name: hsprof1

Hotspot Address: 192.168.10.1

DNS Name: www.kmp-solutions.lan

HTML Directory: flash/hotspot

HTML Directory Override: flash

Rate Limit (x/tx): flash/user-manager

HTTP Proxy: flash/hotspot/xml

HTTP Proxy Port: flash/hotspot/iv

SMTP Server: flash/KMP MUM

flash/hotspot/img

flash/hotspot

flash/hotspot/xml

flash/KMP MUM/img

flash/KMP MUM/iv

flash/KMP MUM/xml

flash/hotspot

flash/hotspot/img

OK

Cancel

Apply

Copy

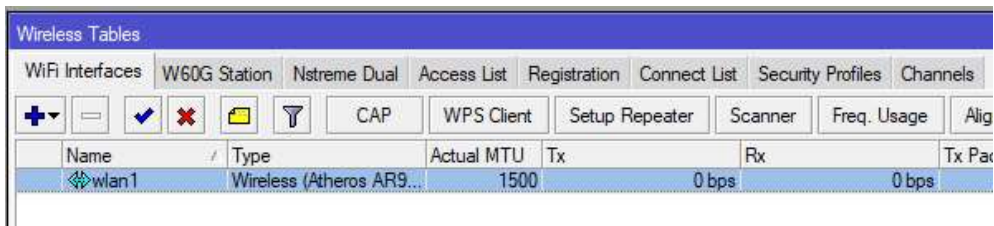
Remove

Garden IP List ...

Find

2 items (1 selected)

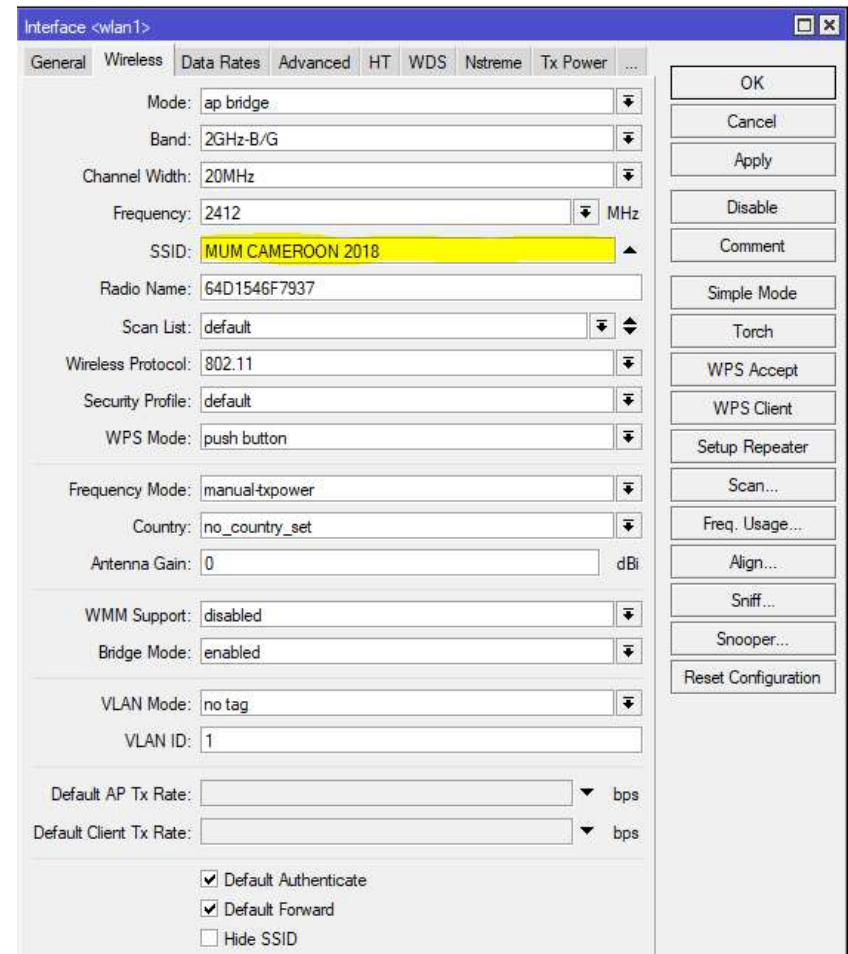
HotSpot Configuration



Wireless Tables

Name	Type	Actual MTU	Tx	Rx	Tx Pack
wlan1	Wireless (Atheros AR9...	1500	0 bps	0 bps	0 bps

- Selectionner l'interface **WLAN1**
- Mode : **Ap bridge**
- Band : **2GHz - B/G**
- SSID : **MUM CAMEROON 2018**
- Wireless Protocol : **802.11**
- **Default Authenticate**



Interface <wlan1>

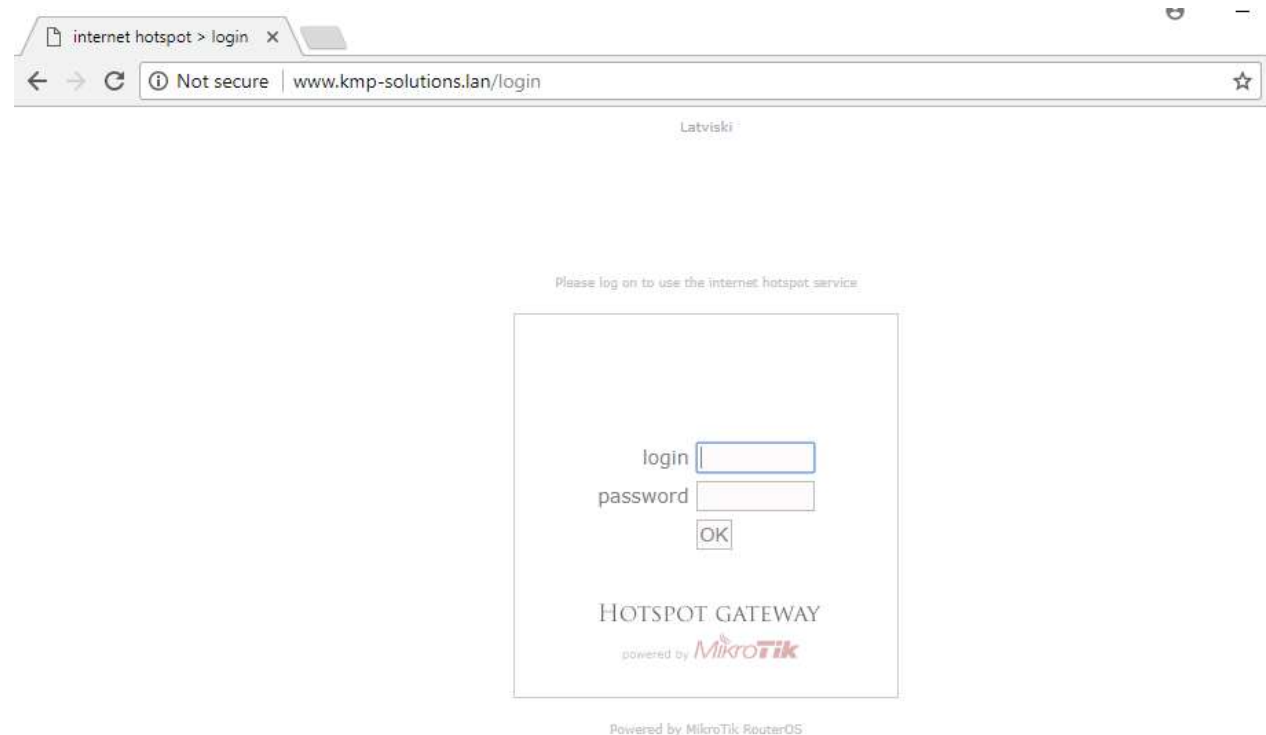
General Wireless Data Rates Advanced HT WDS Nstreme Tx Power ...

Mode: ap bridge
Band: 2GHz-B/G
Channel Width: 20MHz
Frequency: 2412 MHz
SSID: MUM CAMEROON 2018
Radio Name: 64D1546F7937
Scan List: default
Wireless Protocol: 802.11
Security Profile: default
WPS Mode: push button
Frequency Mode: manual-txpower
Country: no_country_set
Antenna Gain: 0 dBi
WMM Support: disabled
Bridge Mode: enabled
VLAN Mode: no tag
VLAN ID: 1
Default AP Tx Rate: bps
Default Client Tx Rate: bps
 Default Authenticate
 Default Forward
 Hide SSID

OK
Cancel
Apply
Disable
Comment
Simple Mode
Torch
WPS Accept
WPS Client
Setup Repeater
Scan...
Freq. Usage...
Align...
Sniff...
Snooper...
Reset Configuration

HotSpot portal page

- Le portail captif est fourni lorsque l'utilisateur tente d'accéder à une page Web.
- Pour vous déconnecter de HotSpot, vous devez aller à
- **<http://router-IP> or <http://HotSpot-DNS>**



HotSpot portal page

The image shows a web browser window displaying a HotSpot portal page. The browser's address bar shows the URL `www.kmp-solutions.lan/login`. The page features a dark blue header with the Mikrotik logo on the left and the KMP SOLUTIONS Consulting logo on the right. The main content area is a dark blue rectangle with a central login form. The form includes a welcome message, a prompt to enter login credentials, two input fields for 'Login' and 'Password', an 'OK' button, and a 'HOTSPOT GATEWAY by Team' button. Below the login form, there is a banner for 'MUM CAMEROON YAOUNDE, JANUARY 26, 2018' with a background image of a city street scene. The browser's tab bar shows several open tabs: 'MUM - MikroTik User Meeting', 'Mikrotik User Manager', 'Vouchers', and 'KMP solutions consulting'.

ROUTING THE WORLD
MikroTik
www.mikrotik.com

KMP SOLUTIONS
Consulting

Please log in to use service

Welcome to the gateway.
Please enter your login credentials.

Login

Password

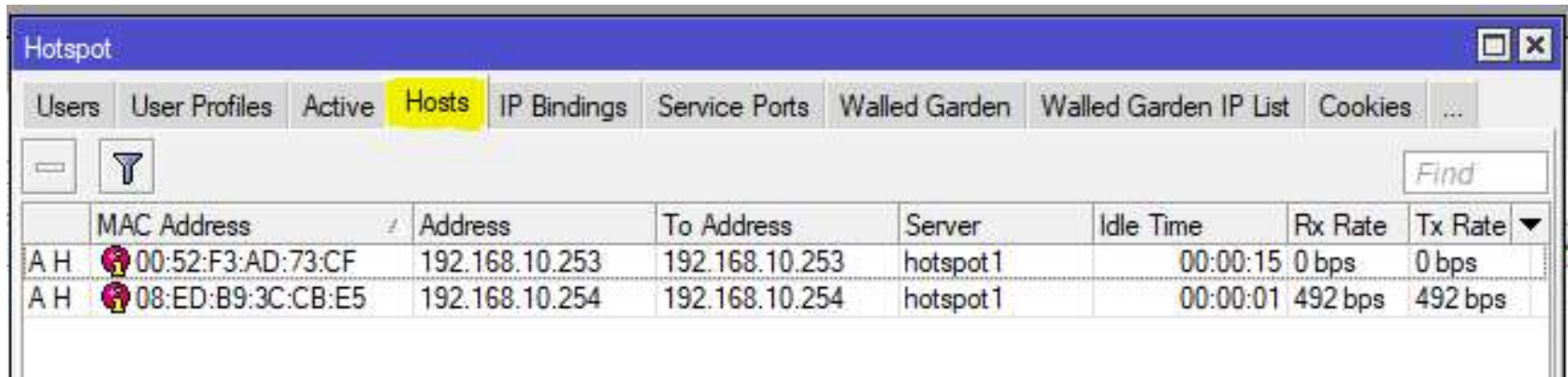
OK

HOTSPOT GATEWAY
by Team

Mikrotik User Meeting

MUM CAMEROON
YAOUNDE, JANUARY 26, 2018

HotSpot Network Hosts

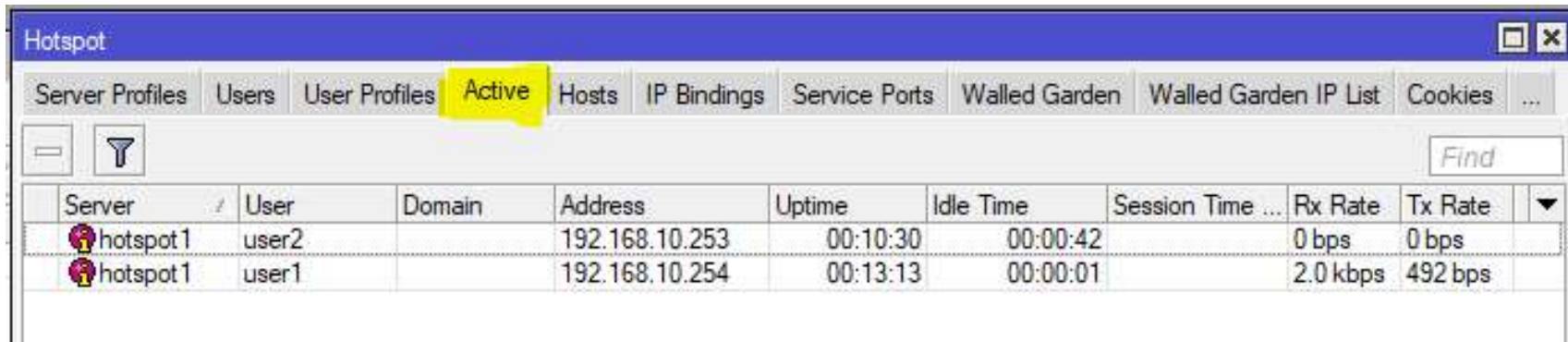


The screenshot shows a window titled "Hotspot" with several tabs: "Users", "User Profiles", "Active", "Hosts" (highlighted), "IP Bindings", "Service Ports", "Walled Garden", "Walled Garden IP List", and "Cookies". Below the tabs is a search bar with a "Find" button. The main area contains a table with the following data:

	MAC Address	Address	To Address	Server	Idle Time	Rx Rate	Tx Rate
A H	00:52:F3:AD:73:CF	192.168.10.253	192.168.10.253	hotspot1	00:00:15	0 bps	0 bps
A H	08:ED:B9:3C:CB:E5	192.168.10.254	192.168.10.254	hotspot1	00:00:01	492 bps	492 bps

- Informations concernant les clients (PC) connectés apparaissent dans l'onglet **Hosts**.

HotSpot Active Table

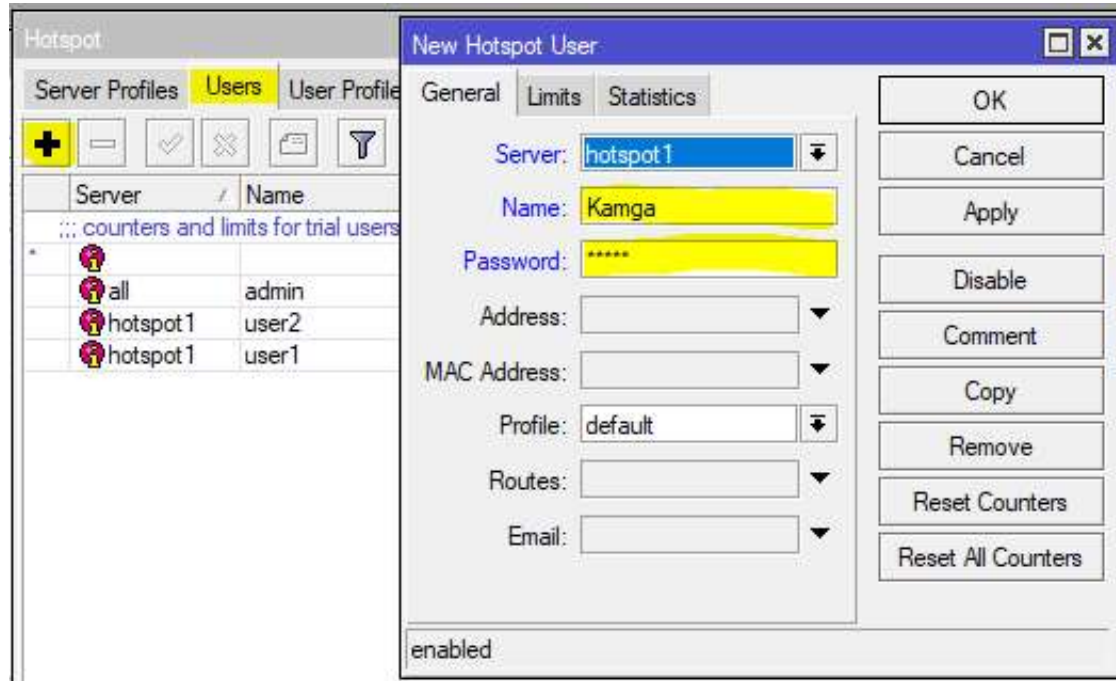


The screenshot shows a window titled "Hotspot" with several tabs: "Server Profiles", "Users", "User Profiles", "Active", "Hosts", "IP Bindings", "Service Ports", "Walled Garden", "Walled Garden IP List", "Cookies", and "...". The "Active" tab is selected and highlighted in yellow. Below the tabs is a search bar with a "Find" button. The main area contains a table with the following data:

Server	User	Domain	Address	Uptime	Idle Time	Session Time ...	Rx Rate	Tx Rate	
hotspot1	user2		192.168.10.253	00:10:30	00:00:42		0 bps	0 bps	
hotspot1	user1		192.168.10.254	00:13:13	00:00:01		2.0 kbps	492 bps	

- Informations concernant les utilisateurs connectés apparaissent dans l'onglet **Active**.

User Management

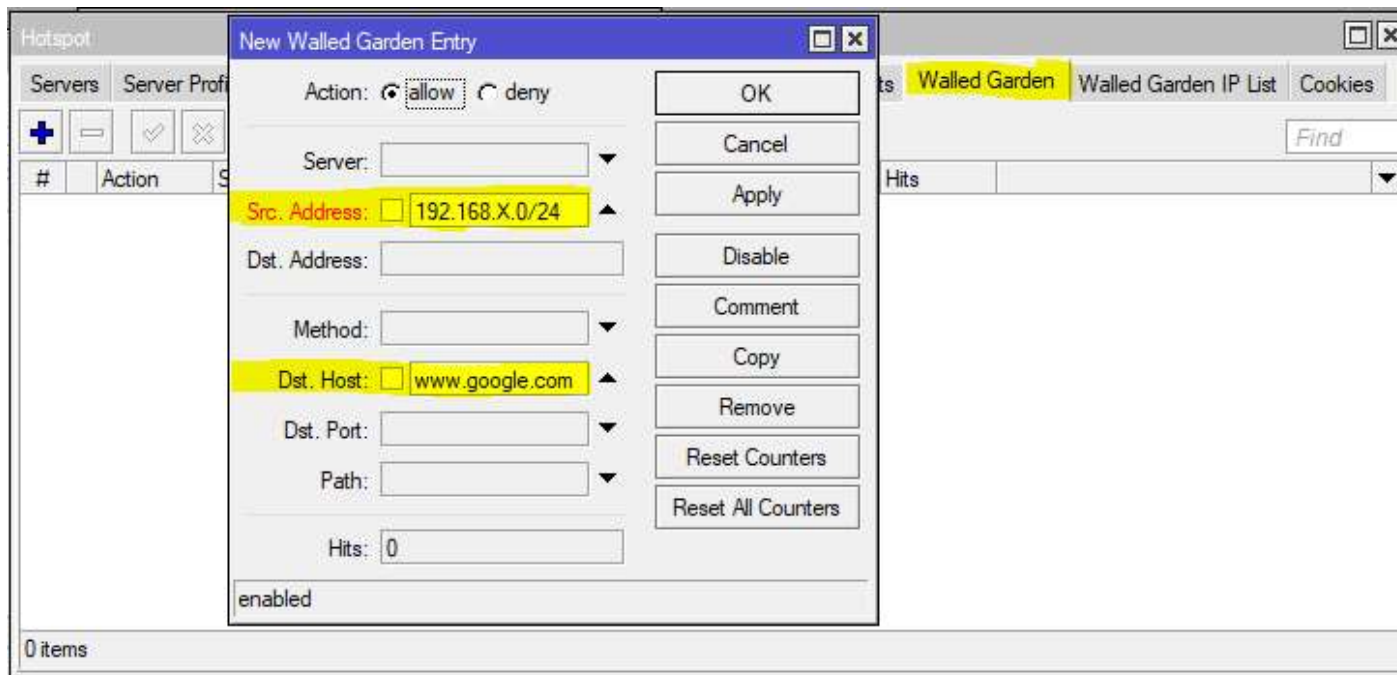


- Ajout/modification/suppression des Hotspot Users

HotSpot Walled-Garden

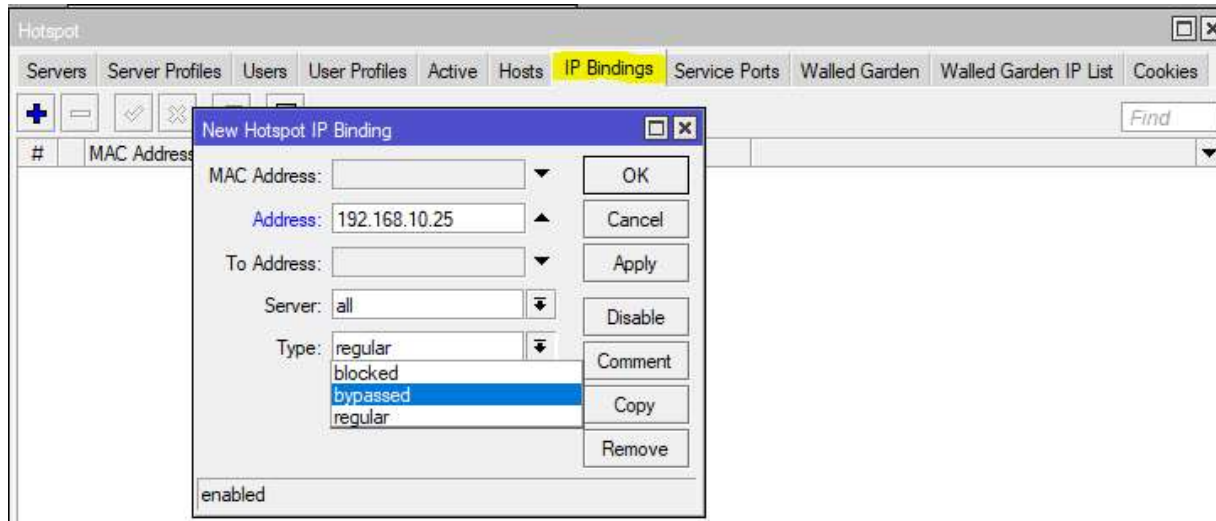
- Outil permettant d'accéder à des ressources spécifiques sans autorisation HotSpot.
- Les ressources spécifiques peuvent être un serveur Web local ou une page Web externe (www.mikrotik.com).
- Walled-Garden pour HTTP et HTTPS.
- Walled-Garden IP pour les autres ressources (Telnet, SSH, Winbox, etc.).

HotSpot Walled-Garden



- Autorise l'accès a **google.com** aux utilisateurs du **192.168.X.0/24**

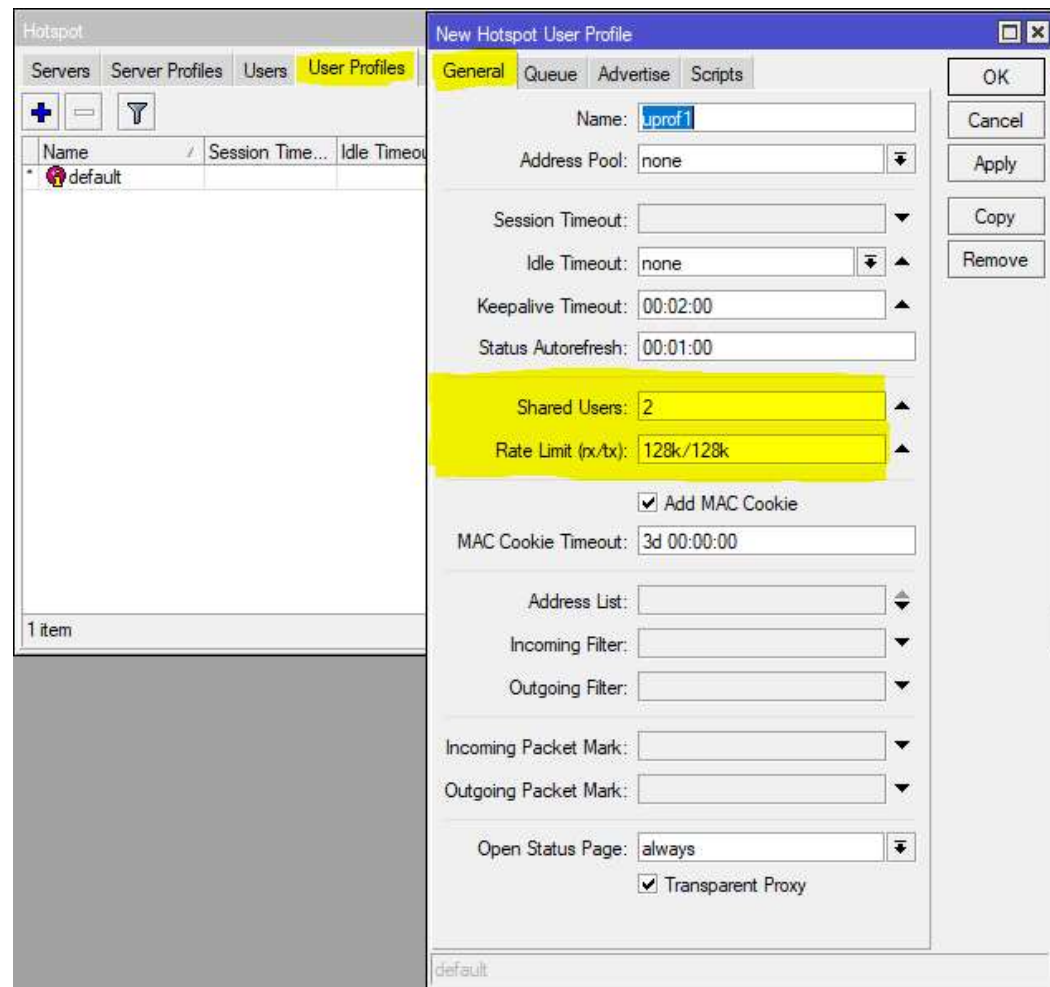
HotSpot IP Bindings



- Bypasser des clients spécifiques via HotSpot.
- VoIP Phones, imprimantes, super-utilisateurs.
- IP Binding n'est pas comme walled-garden. Il ouvre toutes les ressources du réseau public

HotSpot Speed limitation

- Attribuer a un client une bande passante **128k/128k, down/up**
- Permettre a plusieurs clients d'utiliser le **même compte Hotspot (User/password)**





User Manager : C'est quoi?



User Manager

- User Manager ou Userman est un Serveur RADIUS (**R**emote **A**uthentication **D**ial **I**n **U**ser)
- User Manager peut être installé sur MikroTik RouterOS en utilisant le package **userman.npk**
- RADIUS est un protocole qui fournit une **authentication, authorization, accounting** centralisée d'où son appellation de **Triple A (AAA)**
 - **Authentication** : Seul les utilisateurs enregistrés (login/password) ont accès
 - **Authorization** : Définir les droits ou privilèges pour un utilisateur
 - **Accounting** : Journaliser tous les actions d'un utilisateur

User Manager

- Outil de gestion efficace utilisé pour :
 - **HotSpot users (notre cas d'étude)**
 - PPP (PPTP/PPPoE) users
 - DHCP users
 - Wireless users
 - RouterOS users
- Pré-requis
 - Avoir la meme version RouterOS pour vos AP.
 - User manager fonctionne sur des architectures suivantes : **x86, MIPS, PowerPC, TILE, CHR**
 - RouterBoard doit avoir un minimum de **32MB RAM** et **2MB** d'espace libre HDD.

RADIUS Setup for User Manager

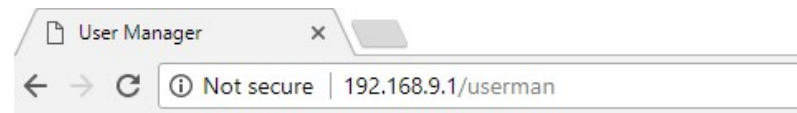
The screenshot displays the Hotspot Manager interface with the 'Server Profiles' tab selected. A table lists server profiles, with 'hsprof1' highlighted. Below the table, the 'Hotspot Server Profile <hsprof1>' dialog is open, showing the 'RADIUS' tab. The 'Use RADIUS' checkbox is checked. The 'New Radius Server' dialog is also open, showing configuration for a RADIUS server with the following details:

Field	Value
Service	<input checked="" type="checkbox"/> hotspot
Called ID	
Domain	
Address	192.168.10.20
Secret	*****
Authentication Port	1812
Accounting Port	1813
Timeout	300 ms
Accounting Backup	<input type="checkbox"/>
Realm	
Src. Address	

The 'New Radius Server' dialog also includes buttons for OK, Cancel, Apply, Disable, Comment, Copy, Remove, and Reset Status. The status of the server is shown as 'enabled' at the bottom.

User Manager configuration

- <http://router-ip/userman>
- Default Username : **admin**
- Default Password : **Blank**

A screenshot of the Mikrotik User Manager login page. The page has a light green background. At the top, the Mikrotik logo is displayed with the text 'MikroTik Mikrotik User Manager' below it. There are two input fields: 'Login' with the text 'admin' and 'Password' which is empty. Below the fields is a 'Log in' button.

User Manager configuration

- Enregistrement des AP

1. Routers
2. Add
3. New

The screenshot displays the MikroTik User Manager web interface. On the left is a navigation menu with buttons for Routers, Users, Sessions, Customers, Logs, Payments, Profiles, Settings, Reports, 0 A sessions, 0 A users, Advanced search, Maintenance, and Logout. The main area shows the 'Add' and 'Edit' options for Routers, with 'New' selected. A 'Router details' dialog box is open, containing the following fields and options:

- Name: AP1 Mikrotik
- Owner: admin
- IP address: 192.168.10.10
- Shared secret: mikrotik
- Time zone: +01:00
- Disabled:
- Log events: Authorization success, Authorization failure, Accounting success, Accounting failure
- Radius incoming:

User Manager configuration

The screenshot displays the MikroTik User Manager web interface. On the left is a navigation menu with buttons for Routers, Users, Sessions, Customers, Logs, Payments, Profiles, Settings, Reports, 0 A sessions, 0 A users, Advanced search, Maintenance, and Logout. The main area shows a table of routers with columns for Name, IP address, and Shared secret. Below the table are two 'Router details' windows, one for AP1 and one for AP2, showing their specific configurations.

MikroTik User Manager

Buttons: Add Edit

<input type="checkbox"/>	▽ Name	▽ IP address	▽ Shared secret
<input type="checkbox"/>	AP1 Mikrotik	192.168.10.10	mikrotik
<input type="checkbox"/>	AP2 Mikrotik	192.168.10.20	mikrotik
<input type="checkbox"/>	AP3 Mikrotik	192.168.10.30	mikrotik

Per page [20] ▾

Router details (AP1)

▲ Main

Name: AP1 Mikrotik
Owner: admin
IP address: 192.168.10.10
Shared secret: mikrotik
Time zone: Parent time zone ▾
Disabled:
Log events: Authorization success, Authorization failure, Accounting success, Accounting failure

▼ Radius incoming

Save

Router details (AP2)

▲ Main

Name: AP2 Mikrotik
Owner: admin
IP address: 192.168.10.20
Shared secret: mikrotik
Time zone: Parent time zone ▾
Disabled:
Log events: Authorization success, Authorization failure, Accounting success, Accounting failure

▼ Radius incoming

Save

User Manager configuration

The screenshot displays the MikroTik User Manager web interface. The browser address bar shows '192.168.9.1/userman'. The main menu on the left includes 'Routers', 'Users', 'Sessions', 'Customers', 'Logs', 'Payments', 'Profiles' (highlighted), 'Settings', 'Reports', '0 A sessions', '0 A users', 'Advanced search', 'Maintenance', and 'Logout'. The 'Profiles' tab is active, showing configuration for a profile named 'Cadre'. The profile details include: Name: Cadre, Owner: admin, Validity: (empty), Starts: At first logon, Price: 0.00, and Shared users: 2. Below these are buttons for 'Save profile', 'Remove profile', and 'Add new limitation'. A 'Create profile' dialog box is open, showing the name 'Cadre' and a 'Create' button. A 'Profile part' dialog box is also open, showing the 'Period' section with days from Sunday to Saturday checked, and a time range from 0:00:00 to 23:59:59. The 'Limits' section has '512K' selected, with other options being 256K, 128K, and 64k. Buttons for 'New limit', 'Cancel', and 'Add' are at the bottom of the dialog.

- **Création de profils utilisateurs**

User Manager configuration

The screenshot displays the MikroTik User Manager web interface. The left sidebar contains navigation menus for Routers, Users, Sessions, Customers, Logs, Payments, Profiles (highlighted), Settings, and Reports. The main content area is titled 'Limitations' and includes 'Add' and 'Edit' buttons. A 'New' button is also visible. A 'Limitation details' dialog box is open, showing the following configuration:

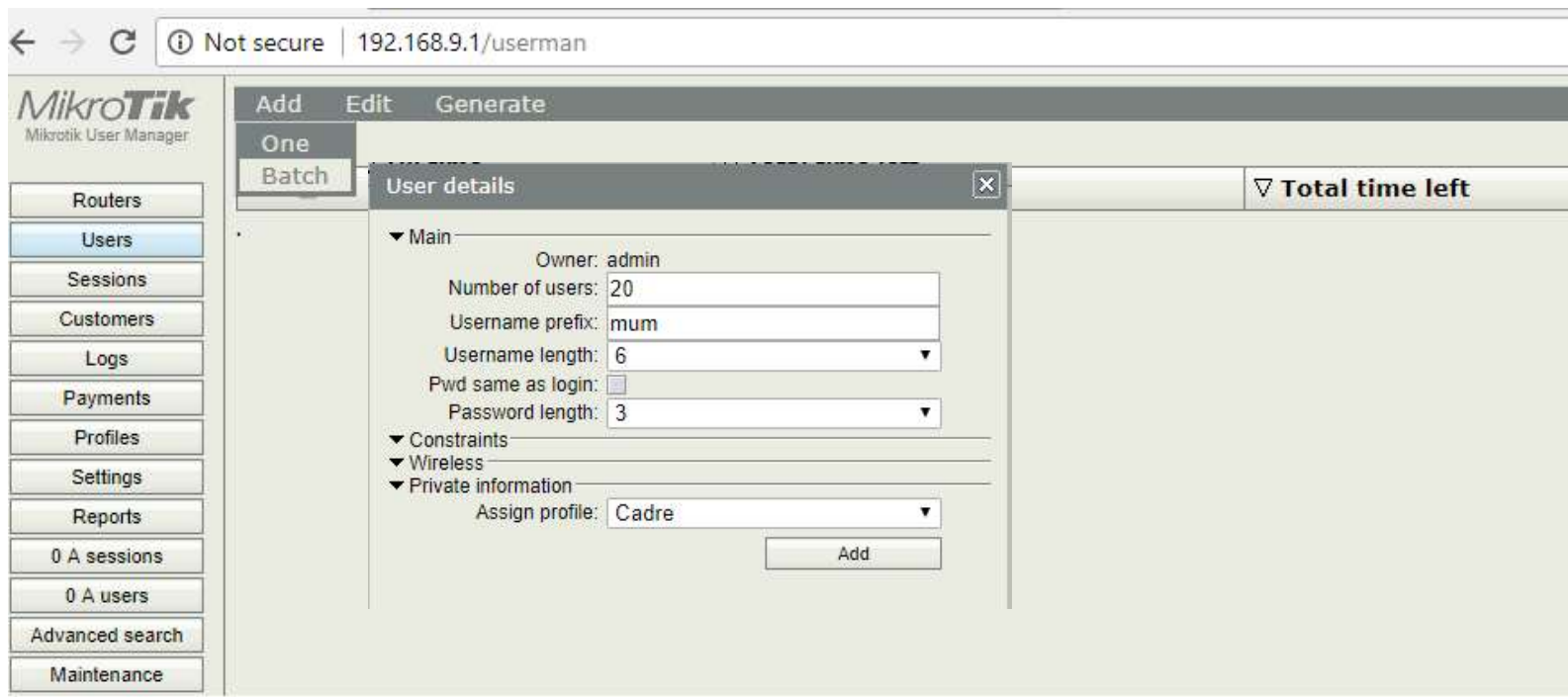
- Main**
 - Name: 512K
 - Owner: admin
- Limits**
 - Download: 512k
 - Upload: 512k
 - Transfer: 0B
 - Uptime:
- Rate limits**
- Constraints**

An 'Add' button is located at the bottom of the dialog. In the background, a table lists various upload limits:

Upload
512.0 KiB
256.0 KiB
128.0 KiB
64.0 KiB

- **Creation des limitations**

Generate Batch User



- Possibilité de générer jusqu'à **999 users** en un seul clic
- Assigner un **Username prefix** et **profile** pour tous.

Generate Batch User

← → ↻ ⓘ Not secure | 192.168.9.1/userman

MikroTik
Mikrotik User Manager

Add Edit Generate

<input checked="" type="checkbox"/>	▽ Username	▽ Till time	▽ Total time left	▽ Actual profile
<input checked="" type="checkbox"/>	mumsppeu2	Unlimited	Unlimited	Cadre
<input checked="" type="checkbox"/>	mum9yfdtj	Unlimited	Unlimited	Cadre
<input checked="" type="checkbox"/>	mumtcck2u	Unlimited	Unlimited	Cadre
<input checked="" type="checkbox"/>	mumpxkfx3	Unlimited	Unlimited	Cadre
<input checked="" type="checkbox"/>	mumgz9a8t	Unlimited	Unlimited	Cadre
<input checked="" type="checkbox"/>	mumf87gfz	Unlimited	Unlimited	Cadre
<input checked="" type="checkbox"/>	mumg64qum	Unlimited	Unlimited	Cadre
<input checked="" type="checkbox"/>	mum59hm8v	Unlimited	Unlimited	Cadre
<input checked="" type="checkbox"/>	mumz426iw	Unlimited	Unlimited	Cadre
<input checked="" type="checkbox"/>	mumfyvt58	Unlimited	Unlimited	Cadre
<input checked="" type="checkbox"/>	mum2sp8ww	Unlimited	Unlimited	Cadre
<input checked="" type="checkbox"/>	mum9ync98	Unlimited	Unlimited	Cadre
<input checked="" type="checkbox"/>	mummy67ra	Unlimited	Unlimited	Cadre
<input checked="" type="checkbox"/>	mum5maepe	Unlimited	Unlimited	Cadre
<input checked="" type="checkbox"/>	mumykau5i	Unlimited	Unlimited	Cadre
<input checked="" type="checkbox"/>	mum5i4h3f	Unlimited	Unlimited	Cadre
<input checked="" type="checkbox"/>	mumwqc6ay	Unlimited	Unlimited	Cadre
<input checked="" type="checkbox"/>	mumqm44j4	Unlimited	Unlimited	Cadre
<input checked="" type="checkbox"/>	mumnrtjnh	Unlimited	Unlimited	Cadre
<input checked="" type="checkbox"/>	mumqx8c7d	Unlimited	Unlimited	Cadre

Routers
Users
Sessions
Customers
Logs
Payments
Profiles
Settings
Reports
0 A sessions
0 A users
Advanced search
Maintenance
Logout

- Liste de vos nouveaux utilisateurs

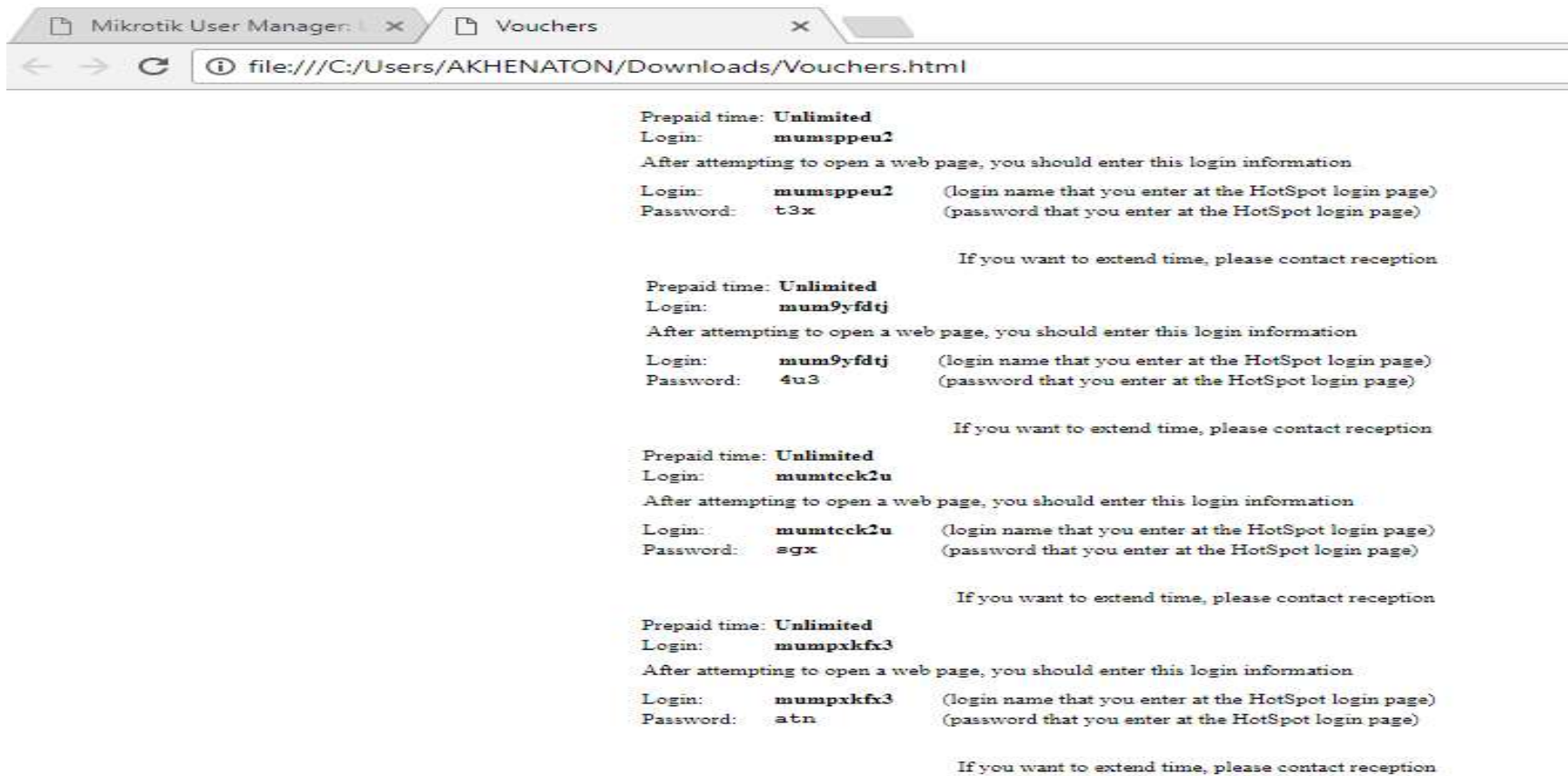
Generate Batch User

The screenshot shows the MikroTik User Manager web interface. The browser address bar indicates the URL is 192.168.9.1/userman. The interface includes a navigation menu on the left with options like Routers, Users, Sessions, Customers, Logs, Payments, Profiles, Settings, Reports, 0 A sessions, 0 A users, Advanced search, Maintenance, and Logout. The main area displays a table of users with columns for Username and Actual profile. A 'User details' dialog box is open, showing fields for Username (mumsppeu2), Password (t3x), Disabled (checkbox), and Owner (admin). The dialog also has sections for Actual profile, Constraints, Wireless, Private information, Statistics, Bill, and All profiles, with a dropdown menu currently set to 'Cadre' and a 'Save' button.

Username	Actual profile
mumsppeu2	Cadre
mum9yfdtj	Cadre
mumtck2u	Cadre
mumpkfx3	Cadre
mumgz9a8t	Cadre
mumf87gfz	Cadre
mumg64qum	Cadre
mum59hm8v	Cadre
mumz426iw	Cadre
mumfyvt58	Cadre
mum2sp8ww	Cadre
mum9ync98	Cadre
mummy67ra	Cadre
mum5maepe	Cadre
mumykau5i	Cadre
mum5i4h3f	Cadre
mumwqc6ay	Cadre
mumqm44j4	Cadre
mumnrtjnh	Cadre
mumqx8c7d	Cadre

- Paramètres utilisateur

Generate Batch User



Mikrotik User Manager x Vouchers x

file:///C:/Users/AKHENATON/Downloads/Vouchers.html

Prepaid time: **Unlimited**
Login: **mumsppeu2**
After attempting to open a web page, you should enter this login information

Login: **mumsppeu2** (login name that you enter at the HotSpot login page)
Password: **t3x** (password that you enter at the HotSpot login page)

If you want to extend time, please contact reception

Prepaid time: **Unlimited**
Login: **mum9yfdtj**
After attempting to open a web page, you should enter this login information

Login: **mum9yfdtj** (login name that you enter at the HotSpot login page)
Password: **4u3** (password that you enter at the HotSpot login page)

If you want to extend time, please contact reception

Prepaid time: **Unlimited**
Login: **mumtckk2u**
After attempting to open a web page, you should enter this login information

Login: **mumtckk2u** (login name that you enter at the HotSpot login page)
Password: **sgx** (password that you enter at the HotSpot login page)

If you want to extend time, please contact reception

Prepaid time: **Unlimited**
Login: **mumpxkfx3**
After attempting to open a web page, you should enter this login information

Login: **mumpxkfx3** (login name that you enter at the HotSpot login page)
Password: **atn** (password that you enter at the HotSpot login page)

If you want to extend time, please contact reception

Customize the User Manager Page

The screenshot displays the MikroTik User Manager web interface. The browser address bar shows '192.168.9.1/userman'. The interface has a sidebar on the left with navigation options: Routers, Users, Sessions, Customers, Logs, Payments, Profiles, Settings (highlighted), Reports, 0 A sessions, 0 A users, Advanced search, Maintenance, and Logout. The main content area is titled 'Vouchers' and contains several tabs: Appearance, Style, Templates (selected), Language, Payment gateways, and Signup. The 'Templates' tab is active, showing the following configuration:

- Name: Vouchers
- Header:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>Vouchers</title>
<style>
@media print {
```
- Row:

```
<table align="center" style="color: black; font-size: 11px;"> <tr
class="space1"><td colspan="3"></td></tr> <tr> <td>Prepaid time:</td> <td>
<b>%u_timeLeft</b></td></tr> <!-- <tr> <td>Price:</td> <td>
<b>%u_totalPrice</b></td></tr> <tr> --> <td>Login:</td> <td>
<b>%u_username</b></td></tr> <tr class="space2"><td colspan="3"></td></tr>
<tr> <td colspan="3"> After attempting to open a web page, you should
enter this login information </td></tr> <tr height="5px"><td colspan="3">
</td></tr> </table>
```
- Footer:

```
<p class="noprint" style="font-size: 10px"> ..... page break
..... </p> <p class="pagebreak">&nbsp;</p>
```
- Break: (empty field)
- File extension: (empty field)

At the bottom of the configuration area, there are 'Save' and 'Reset' buttons.

- Possibilité de changer le Template ou de télécharger un autre sur internet

Customize the Voucher Code

HOTEL PARAKEE	HOTEL PARAKEE	HOTEL PARAKEE	HOTEL PARAKEE	HOTEL PARAKEE	HOTEL PARAKEE
Free WiFi	Free WiFi	Free WiFi	Free WiFi	Free WiFi	Free WiFi
Username hg8k	Username 4nwb	Username 9u2r	Username 75uu	Username xh3g	Username i5bf
Password aaaa	Password x9jq	Password 8ts7	Password 27t2	Password 5abl	Password vq3q
Time 5d18h13m1s	Time 1w	Time 1w	Time 1w	Time 1w	Time 1w
Shared Users 3	Shared Users 3	Shared Users 3	Shared Users 3	Shared Users 3	Shared Users 3
Profile Deluxe	Profile Deluxe	Profile Deluxe	Profile Deluxe	Profile Deluxe	Profile Deluxe
Powered By NETPRO MYANMAR	Powered By NETPRO MYANMAR	Powered By NETPRO MYANMAR	Powered By NETPRO MYANMAR	Powered By NETPRO MYANMAR	Powered By NETPRO MYANMAR

HOTEL PARAKEE	HOTEL PARAKEE	HOTEL PARAKEE	HOTEL PARAKEE	HOTEL PARAKEE	HOTEL PARAKEE
Free WiFi	Free WiFi	Free WiFi	Free WiFi	Free WiFi	Free WiFi
Username uh8s	Username zftt	Username gmdh	Username acvn	Username 6ugg	Username k74r
Password ik64	Password fhgv	Password ev3r	Password v27t	Password 33uq	Password gfef
Time 1w	Time 1w	Time 1w	Time 1w	Time 1w	Time 1w
Shared Users 3	Shared Users 3	Shared Users 3	Shared Users 3	Shared Users 3	Shared Users 3
Profile Deluxe	Profile Deluxe	Profile Deluxe	Profile Deluxe	Profile Deluxe	Profile Deluxe
Powered By NETPRO MYANMAR	Powered By NETPRO MYANMAR	Powered By NETPRO MYANMAR	Powered By NETPRO MYANMAR	Powered By NETPRO MYANMAR	Powered By NETPRO MYANMAR

- Voucher code après changement du Template

Final test !!!!





THANKS YOU

