

USER MANAGER

For

Hotspot User Management





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MTCNA
MTCRE
MTCUME
MTCINE



ID-Networkers
INDONESIAN EXPERT FACTORY

About Madinatul 'Ilmi Vocational High School



We learn networking from morning until night.

Not only learn about networking, we also learning about religious.

We also have programming class! which focus learning about mobile aps.

What is User Manager??



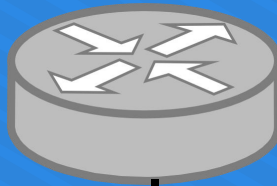
User manager is features which can used to centralized user management.

User manager can manage hotspot user, PPP users, Wireless users, and RouterOS users.

We have a problem!!

I want to create user
'guest' that can used to
login hotspot in all of
Mikrotik AP

Core Router



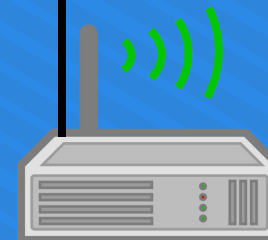
Mikrotik AP1
(North)



Mikrotik AP2
(West)



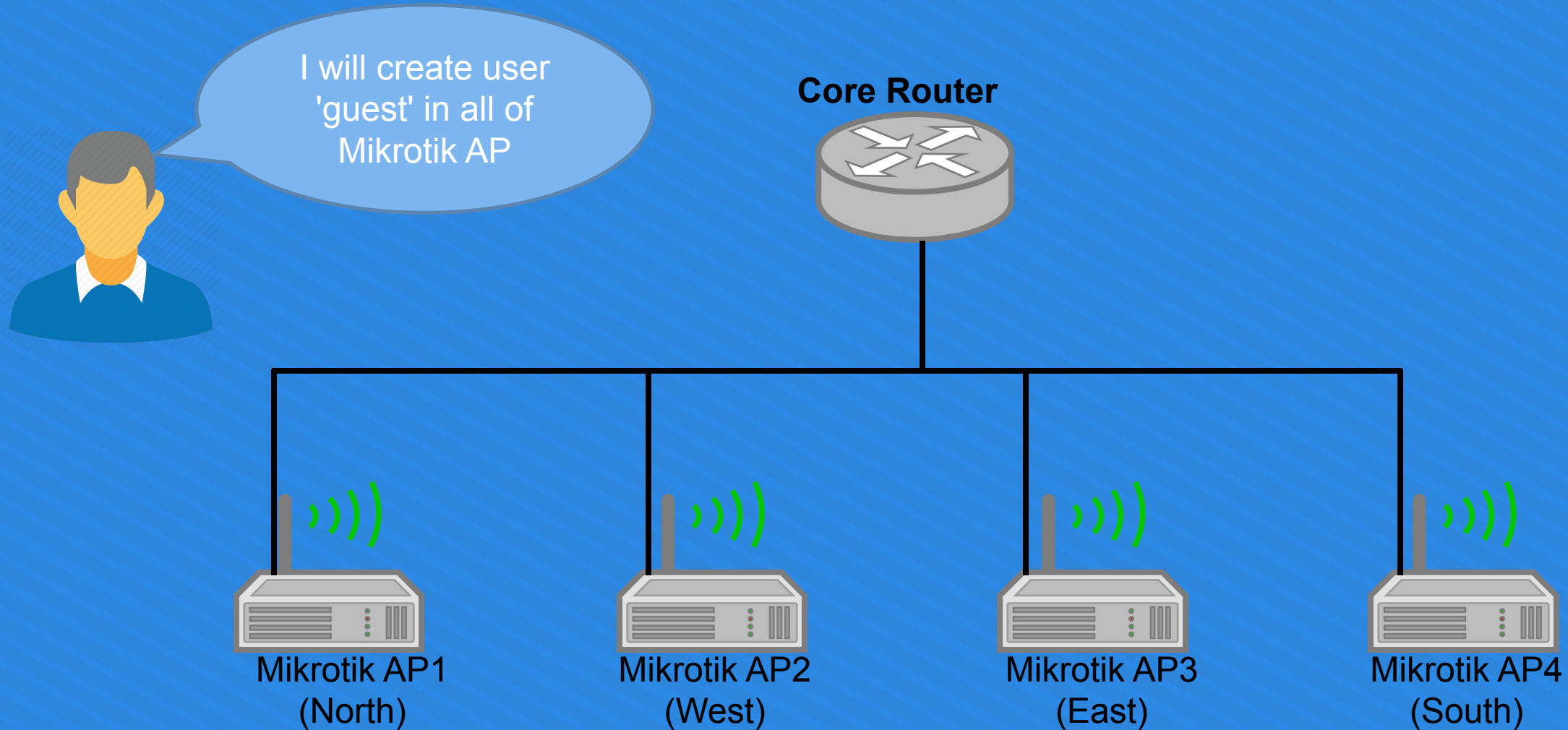
Mikrotik AP3
(East)



Mikrotik AP4
(South)



Solution 1



Is This The Best Solution??

Solution 1

<The Weakness>



I will create user 'guest'
in all of Mikrotik AP

That is litle crazy solution man!!

If you must manage bandwidht
for 'guest' user, will you create
queue rule in 100 router too?

That is litle crazy solution
man!!

if you have 100 router, will
you create user in 100
router??



Solution 1

<The Weakness>



I will create user 'guest'
in all of Mikrotik AP

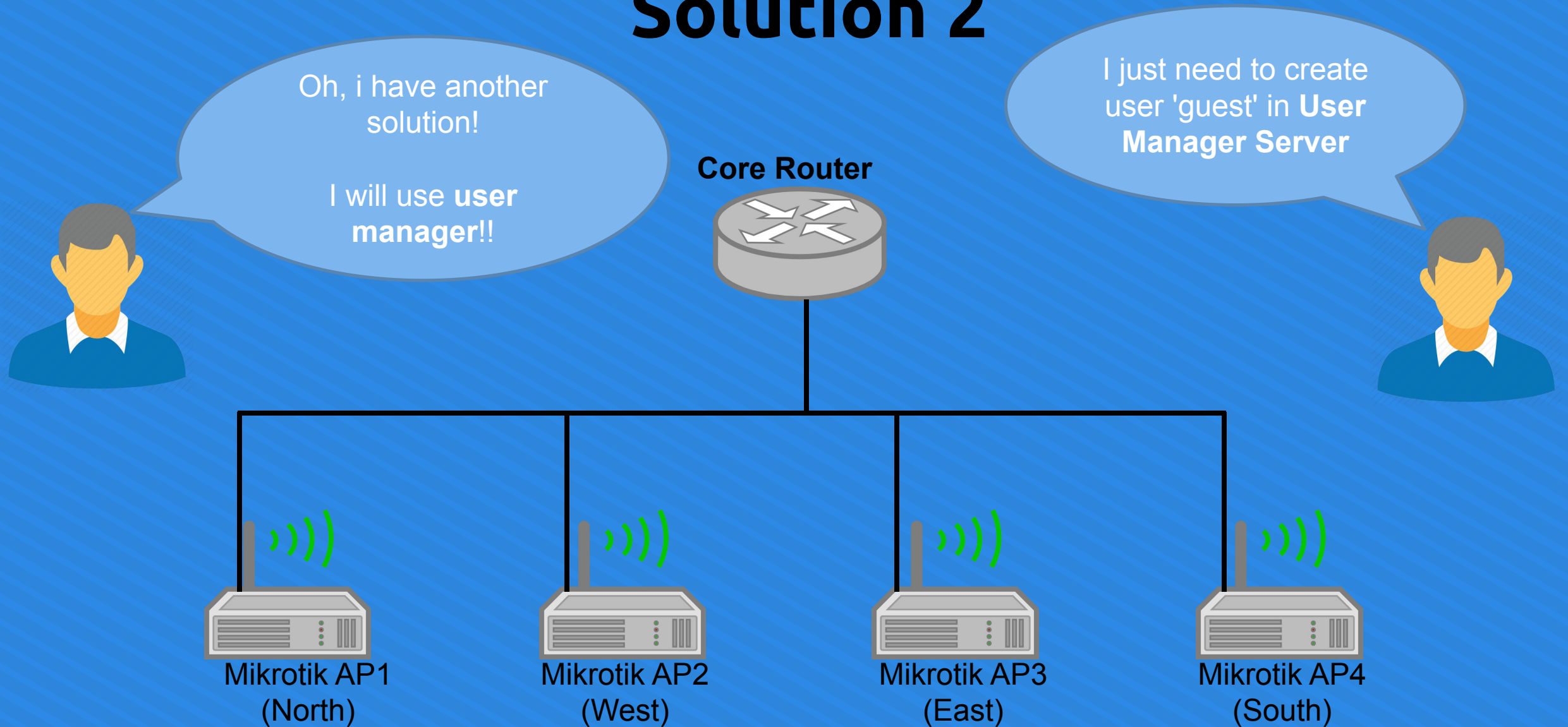
That is little crazy solution
man!!

If you need to monitor
user, will you monitor in
100 router??



Do you have
another solution??

Solution 2

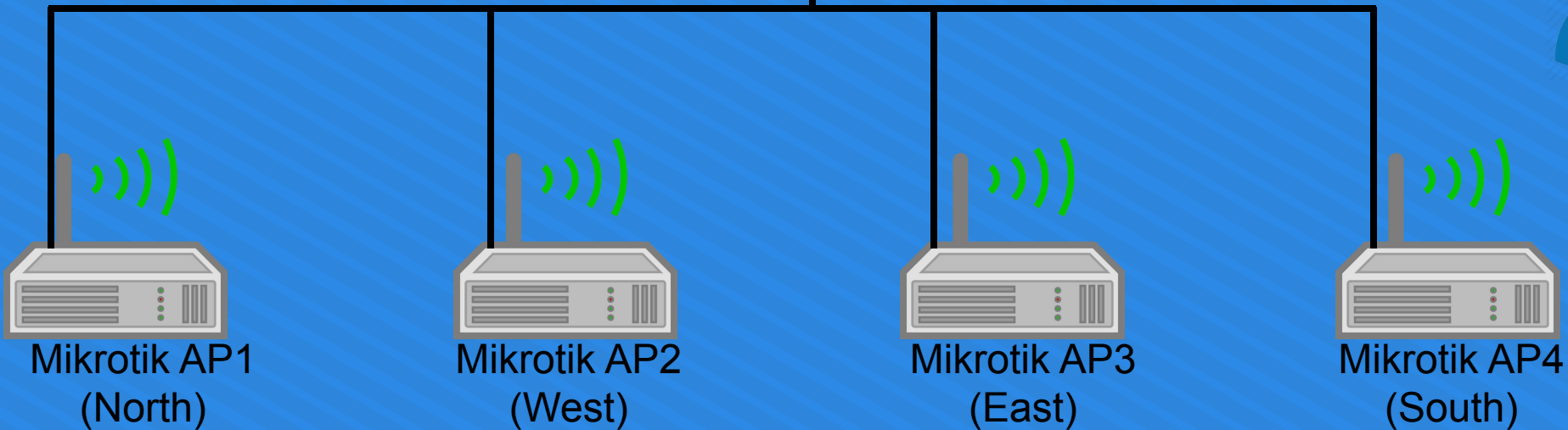
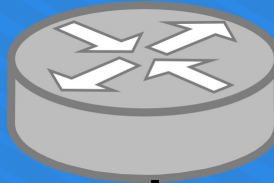


Solution 2

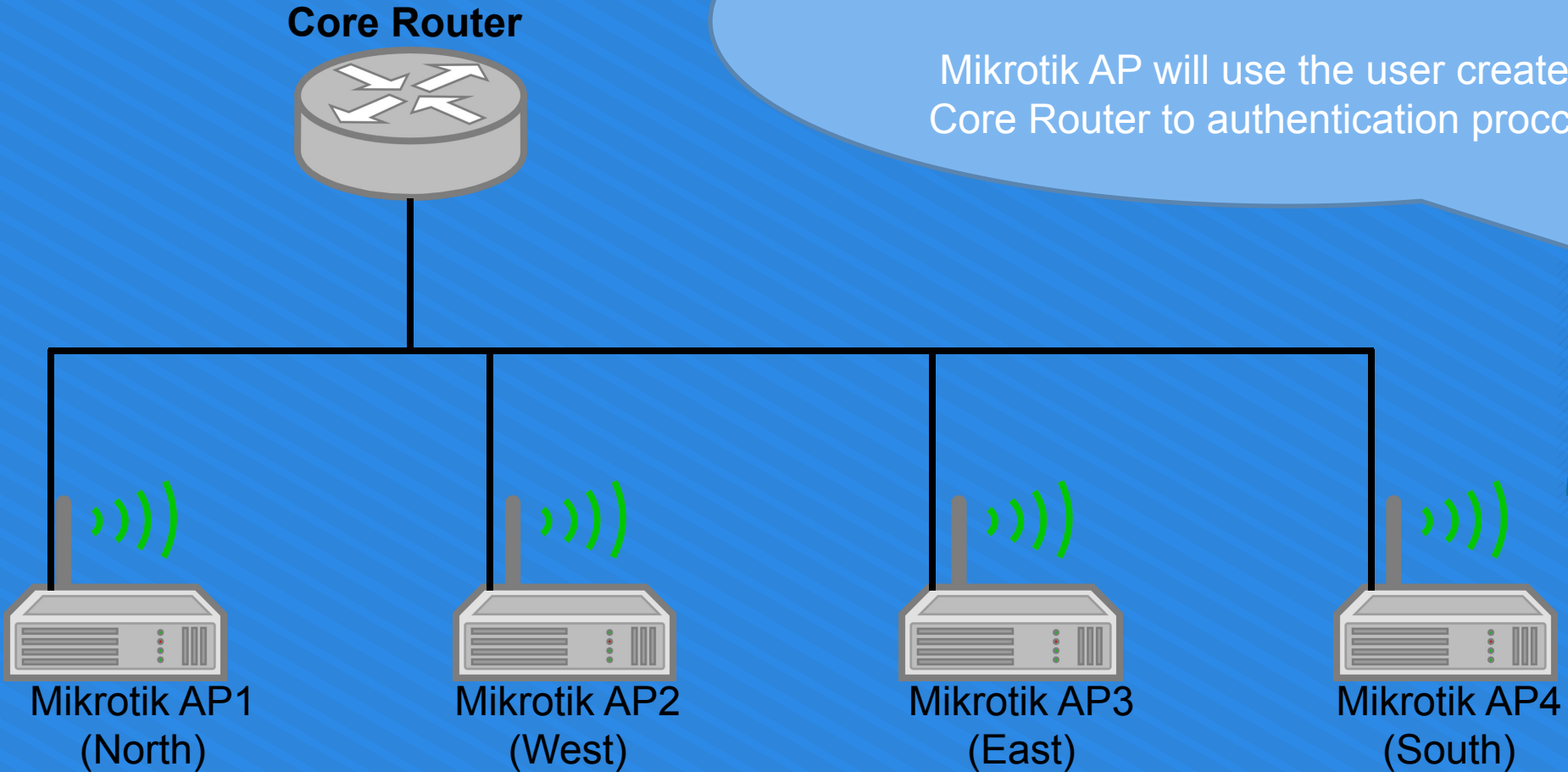
I will configure user manager server (Radius Server) in **Core Router**

All of Mikrotik AP will become a NAS (Radius Client).

Core Router



Solution 2



Solution 2



How about bandwidth management?



Cause we only create user in Core Router, so we just only need to configure bandwidth management in Core Router too!

Solution 2

How about monitoring??
can you monitor all logged
in user only in Core
Router??



Absouluteley!! Remember that we only
create user in Core Router, so all user
activity will captured by Core Router.



The benifits



So what actually the
benifits of user manager?



This is about Efficiency! If we use user
manager, we can implement
Centralized User Management



When we must use User Manager?

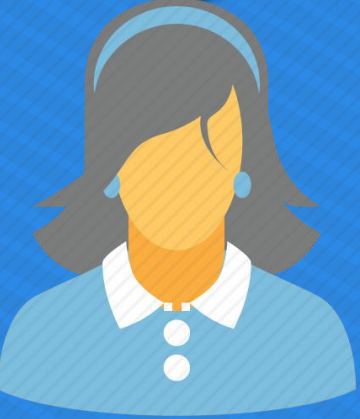


So, when we must use **User Manager**?



When we have more than one Mikrotik AP and we need **centralized user management** method!

Who Needs User Manager?



Who needs user manager??



User manager will be very usefull for **Internet Service Provider**. In user manager, we can make vouchers.

ISP can use that vouchers to sell internet connections.

Vouchers Example

This is vouchers example,
generated by User Manager



Hotspot - Internet Card Rs 5000.00

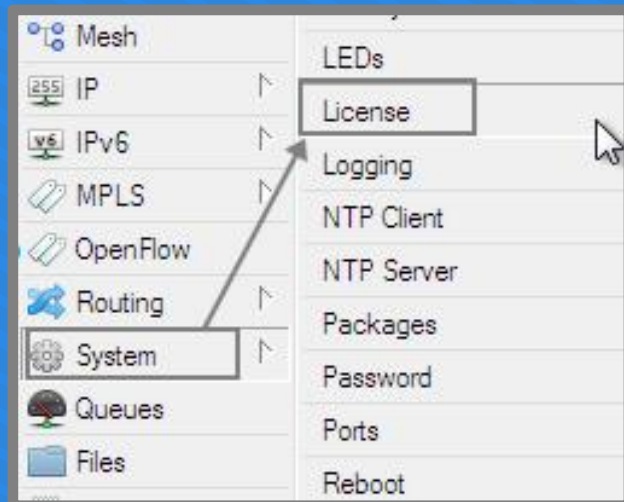
Connect to Wireless Network and open you webbrowser.
Put the **UserName** and **Password** in required field, then
click login button.

UserName:	5pkse6	1w3d
Password:	qfnt2h	
		Price: 5000.00

Contact for more info. myconfigure.blogspot.com

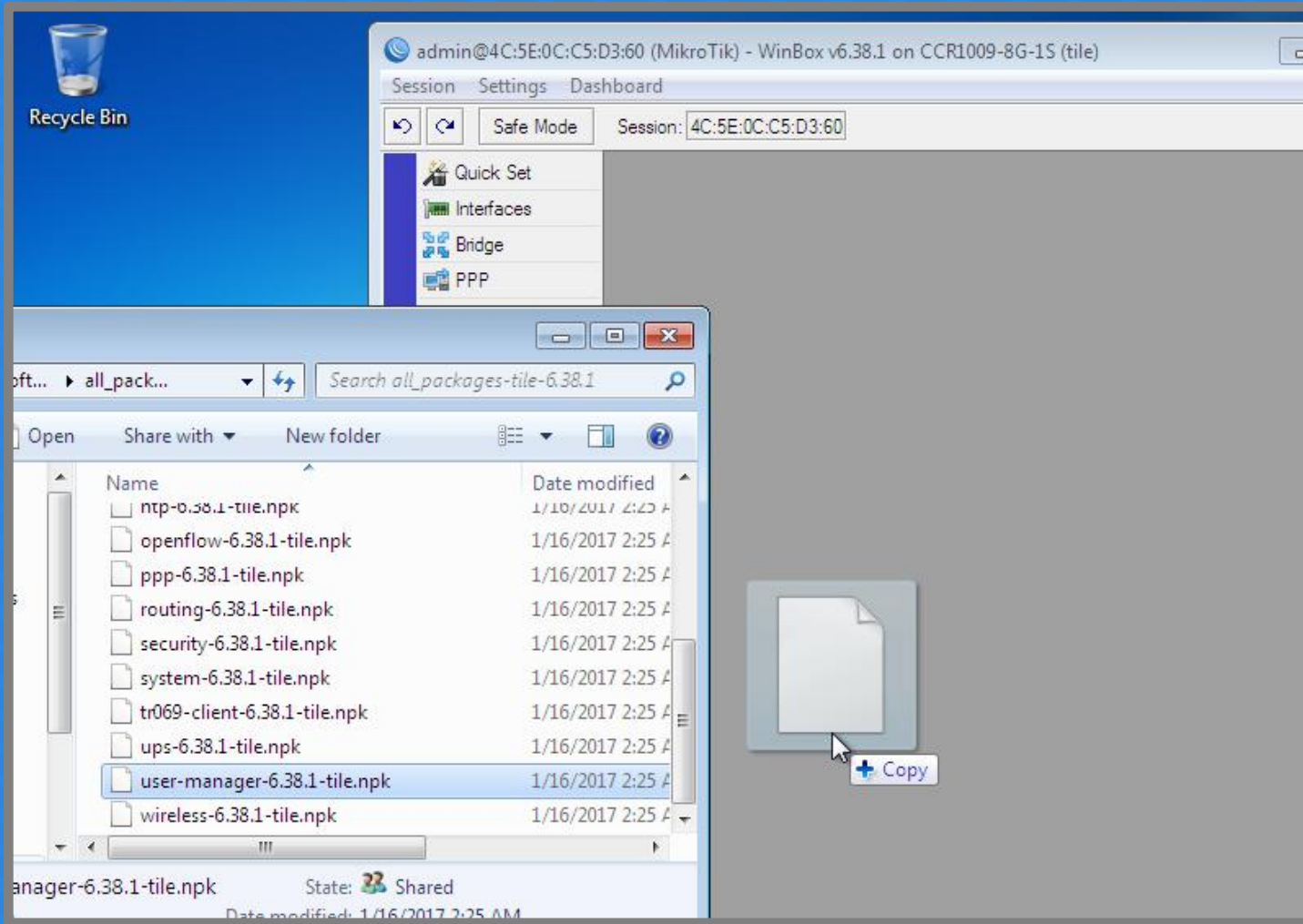
Usermanager Limitation

Mikrotik Level	User Manager Active Users
Level 3	1
Level 4	20
Level 5	50
Level 6	Unlimited

A screenshot of the 'License' configuration window in WinBox. The window has a purple title bar with the text 'License'. It contains the following fields and buttons:

- Software ID: J2NK-ND3L
- Level: 6
- Features: (empty field)
- Buttons on the right: OK, Paste Key, Import Key..., Export Key..., Update License Key, Upgrade/Get New Key...

User Manager Installation



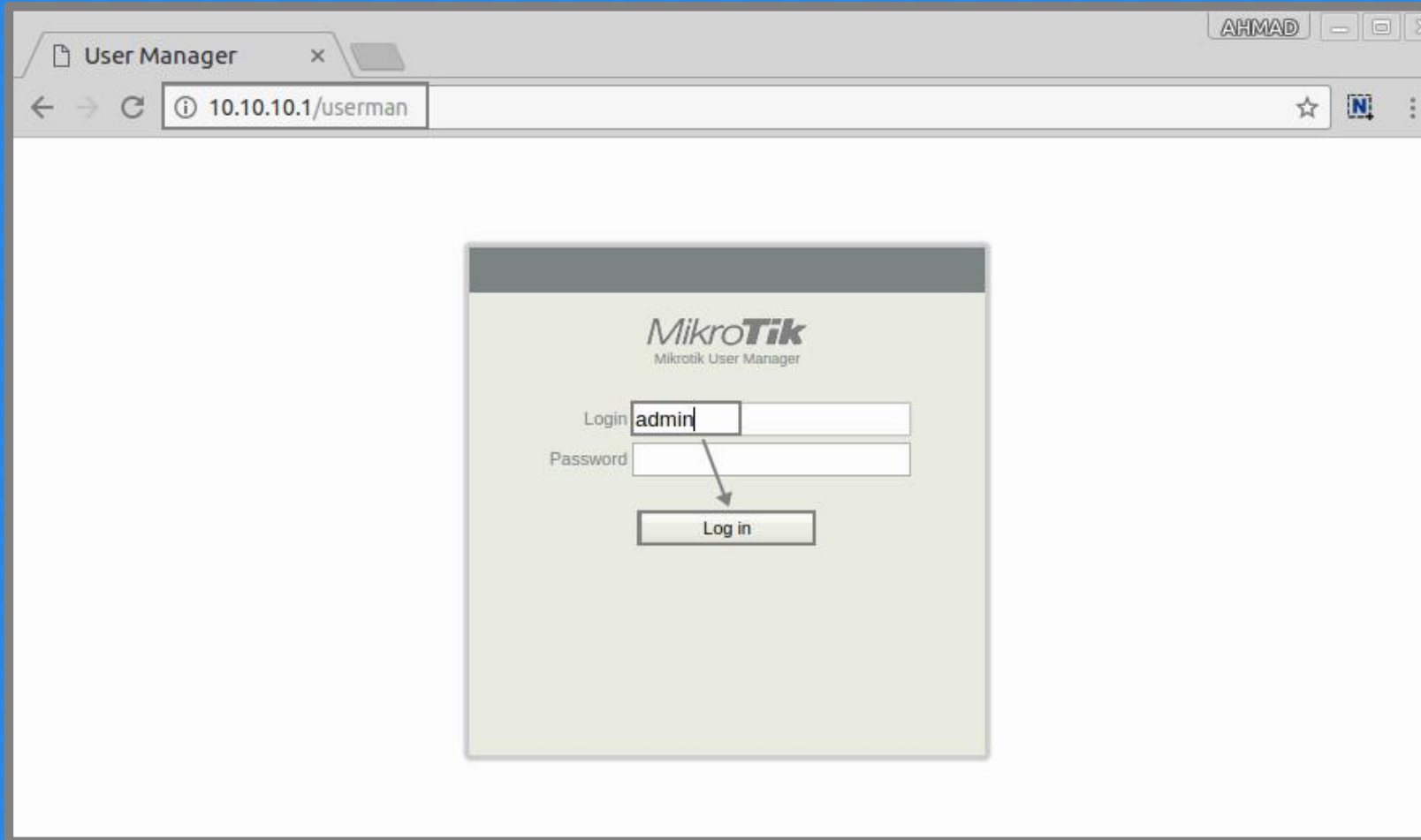
The screenshot shows the 'File List' window in WinBox. It displays a list of files and directories on the router. The file 'user-manager-6.38.1-tile.npk' is highlighted at the bottom of the list. The table below provides details for each file.

File Name	Type	Size
hotspot/xml/WISPAccessGa...	xsd file	4251 B
hotspot/xml/alogin.html	.html file	821 B
hotspot/xml/error.html	.html file	416 B
hotspot/xml/flogout.html	.html file	361 B
hotspot/xml/login.html	.html file	787 B
hotspot/xml/logout.html	.html file	359 B
hotspot/xml/rlogin.html	.html file	530 B
skins	directory	
um-before-migration.tar	.tar file	17.0 KB
user-manager	directory	
user-manager/logsqldb	file	6.0 KB
user-manager/sqlldb	file	80.0 KB
user-manager-6.38.1-tile.npk	package	1200.1 KB

Reboot your router!!

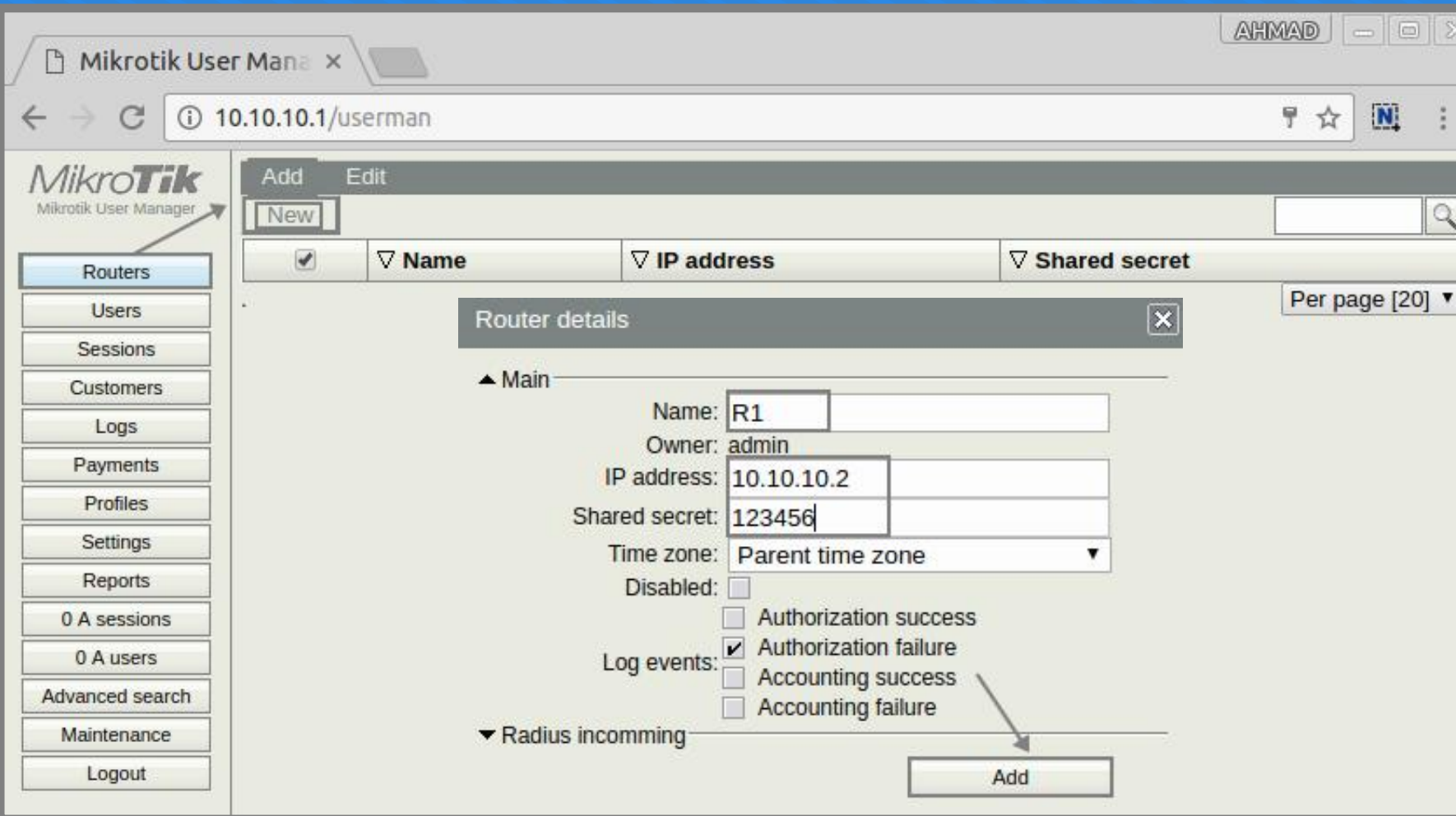
Configuring User Manager

`http://10.10.10.2/userman`



Default user
is admin
with 'blank'
password

Configuring User Manager



The screenshot shows the Mikrotik User Manager web interface in a browser window. The address bar displays '10.10.10.1/userman'. The left sidebar contains a menu with options: Routers, Users, Sessions, Customers, Logs, Payments, Profiles, Settings, Reports, 0 A sessions, 0 A users, Advanced search, Maintenance, and Logout. The 'Routers' option is selected. The main content area has tabs for 'Add' and 'Edit', with 'Add' being active. Below the tabs is a 'New' button. A table with columns 'Name', 'IP address', and 'Shared secret' is visible. A 'Router details' modal window is open, showing the following fields: Name (R1), Owner (admin), IP address (10.10.10.2), Shared secret (123456), Time zone (Parent time zone), Disabled (checkbox), Log events (checkboxes for Authorization success, Authorization failure, Accounting success, Accounting failure), and Radius incoming (checkbox). An 'Add' button is at the bottom right of the modal.

MikroTik User Manager

10.10.10.1/userman

Add Edit

New

	Name	IP address	Shared secret
--	------	------------	---------------

Per page [20]

Router details

▲ Main

Name: R1

Owner: admin

IP address: 10.10.10.2

Shared secret: 123456

Time zone: Parent time zone

Disabled: ☐

Log events: ☐ Authorization success ☒ Authorization failure ☐ Accounting success ☐ Accounting failure

▼ Radius incoming

Add

add router,
which will
managed by
user manager
(R1 & R2)

Configuring User Manager <continue>

The screenshot shows the Mikrotik User Manager web interface in a browser window. The address bar displays '10.10.10.1/userman'. The left sidebar contains a menu with items: Routers, Users, Sessions, Customers, Logs, Payments, Profiles (highlighted), Settings, Reports, 0 A sessions, 0 A users, Advanced search, Maintenance, and Logout. The main content area has tabs for 'Profiles' and 'Limitations', with 'Limitations' selected. Below the tabs are 'Add' and 'Edit' buttons. A table header shows columns: Name, Download, Upload, Transfer, and Uptime. A 'Limitation details' modal is open, showing fields for Name (512k), Owner (admin), Download (512K), Upload (512K), Transfer (0B), and Uptime (2h). At the bottom of the modal is an 'Add' button. Arrows point from the 'Profiles' menu item, the 'Limitations' tab, and the 'Add' button at the bottom of the modal.

Mikrotik User Manager

10.10.10.1/userman

Profiles Limitations

Add Edit

☒	Name	Download	Upload	Transfer	Uptime
-------------------------------------	------	----------	--------	----------	--------

Per page [20]

Limitation details

▲ Main

Name: 512k

Owner: admin

▲ Limits

Download: 512K

Upload: 512K

Transfer: 0B

Uptime: 2h

▼ Rate limits

▼ Constraints

Add

add limitation
for profiles

Configuring User Manager <continue>

The screenshot displays the Mikrotik User Manager web interface. On the left, a sidebar menu includes options like Routers, Users, Sessions, Customers, Logs, Payments, Profiles (highlighted), Settings, Reports, and Logout. The main content area has tabs for Profiles and Limitations. A 'Create profile' dialog box is open, showing 'Name: profile 512' and a 'Create' button. Below this, a form for profile details is visible, including fields for Name, Owner, Validity, Starts, Price, and Shared users. A 'Profile part' dialog box is also open, showing a list of days (Sunday through Saturday) with checkboxes, a time range from 0:00:00 to 23:59:59, and a 'Limits' section with a checkbox for '512K'. Arrows indicate the flow of configuration steps: from the 'Profiles' tab to the 'Create profile' dialog, then to the profile details form, and finally to the 'Profile part' dialog.

add a new
profile

Configuring User Manager

<continue>

The screenshot shows the Mikrotik User Manager web interface in a browser window. The address bar shows '10.10.10.1/userman'. The left sidebar contains a menu with items: Routers, Users, Sessions, Customers, Logs, Payments, Profiles, Settings, Reports, 0 A sessions, 0 A users (highlighted), Advanced search, Maintenance, and Logout. The main content area has tabs for 'Add', 'Edit', and 'Generate'. Below these is a table with columns: Username, Till time, Total time left, and Actual profile. A 'Batch' button is highlighted with an arrow. A modal window titled 'User details' is open, showing configuration fields: Owner (admin), Number of users (10), Username prefix (mum), Username length (6), Pwd same as login (checkbox), Password length (3), Assign profile (profile 512), and an 'Add' button. Arrows point from the 'Batch' button and the '0 A users' menu item to the modal.

Mikrotik User Manager

10.10.10.1/userman

MikroTik
Mikrotik User Manager

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

Add Edit Generate

One Batch

Username	Till time	Total time left	Actual profile
----------	-----------	-----------------	----------------

Per page [20]

User details

▼ Main

Owner: admin

Number of users: 10

Username prefix: mum

Username length: 6

Pwd same as login: ☐

Password length: 3

▼ Constraints

▼ Wireless

▼ Private information

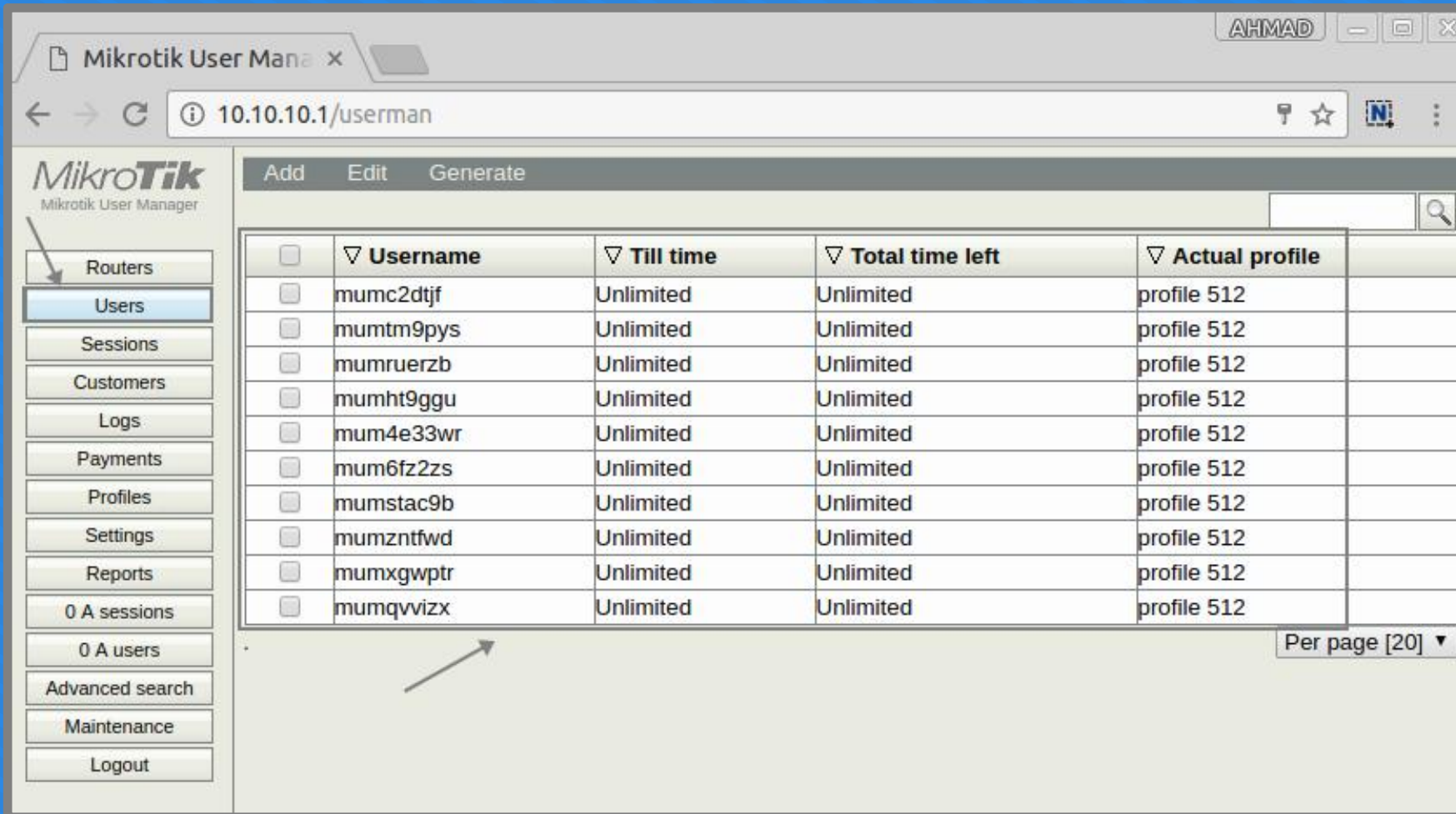
Assign profile: profile 512

Add

create
batch users

Configuring User Manager

<continue>



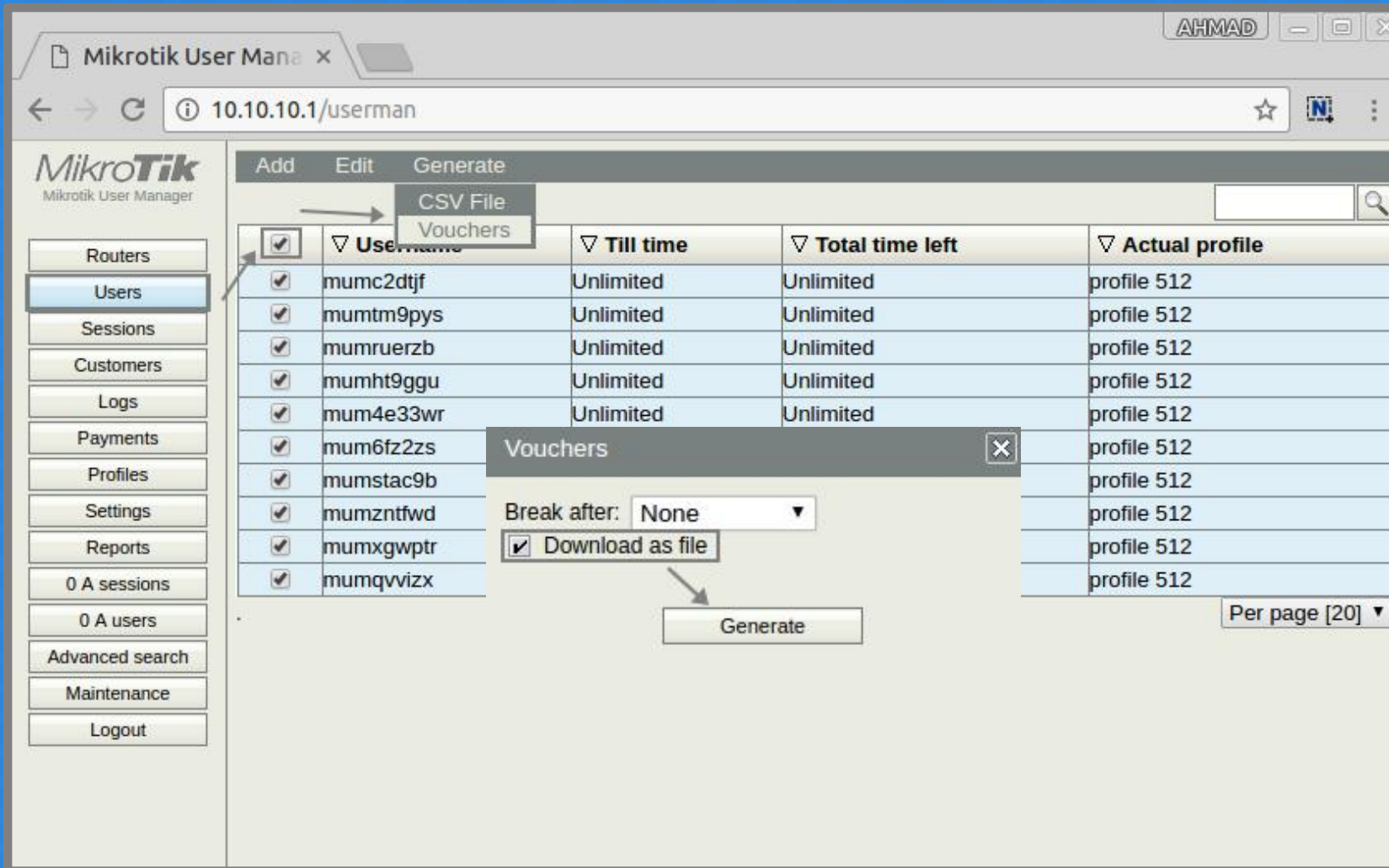
The screenshot shows the Mikrotik User Manager web interface in a browser window. The address bar displays "10.10.10.1/userman". The left sidebar contains a menu with options: Routers, Users (highlighted), Sessions, Customers, Logs, Payments, Profiles, Settings, Reports, 0 A sessions, 0 A users, Advanced search, Maintenance, and Logout. The main content area has tabs for "Add", "Edit", and "Generate". Below these tabs is a table listing users. The table has columns for Username, Till time, Total time left, and Actual profile. All users listed have "Unlimited" for both Till time and Total time left, and "profile 512" for the Actual profile. The table is paginated, showing "Per page [20]".

☐	Username	Till time	Total time left	Actual profile
☐	mumc2dtjf	Unlimited	Unlimited	profile 512
☐	mumtm9pys	Unlimited	Unlimited	profile 512
☐	mumruerzb	Unlimited	Unlimited	profile 512
☐	mumht9ggu	Unlimited	Unlimited	profile 512
☐	mum4e33wr	Unlimited	Unlimited	profile 512
☐	mum6fz2zs	Unlimited	Unlimited	profile 512
☐	mumstac9b	Unlimited	Unlimited	profile 512
☐	mumzntfwd	Unlimited	Unlimited	profile 512
☐	mumxgwptr	Unlimited	Unlimited	profile 512
☐	mumqvvizx	Unlimited	Unlimited	profile 512

the list of
new users

Configuring User Manager

<continue>

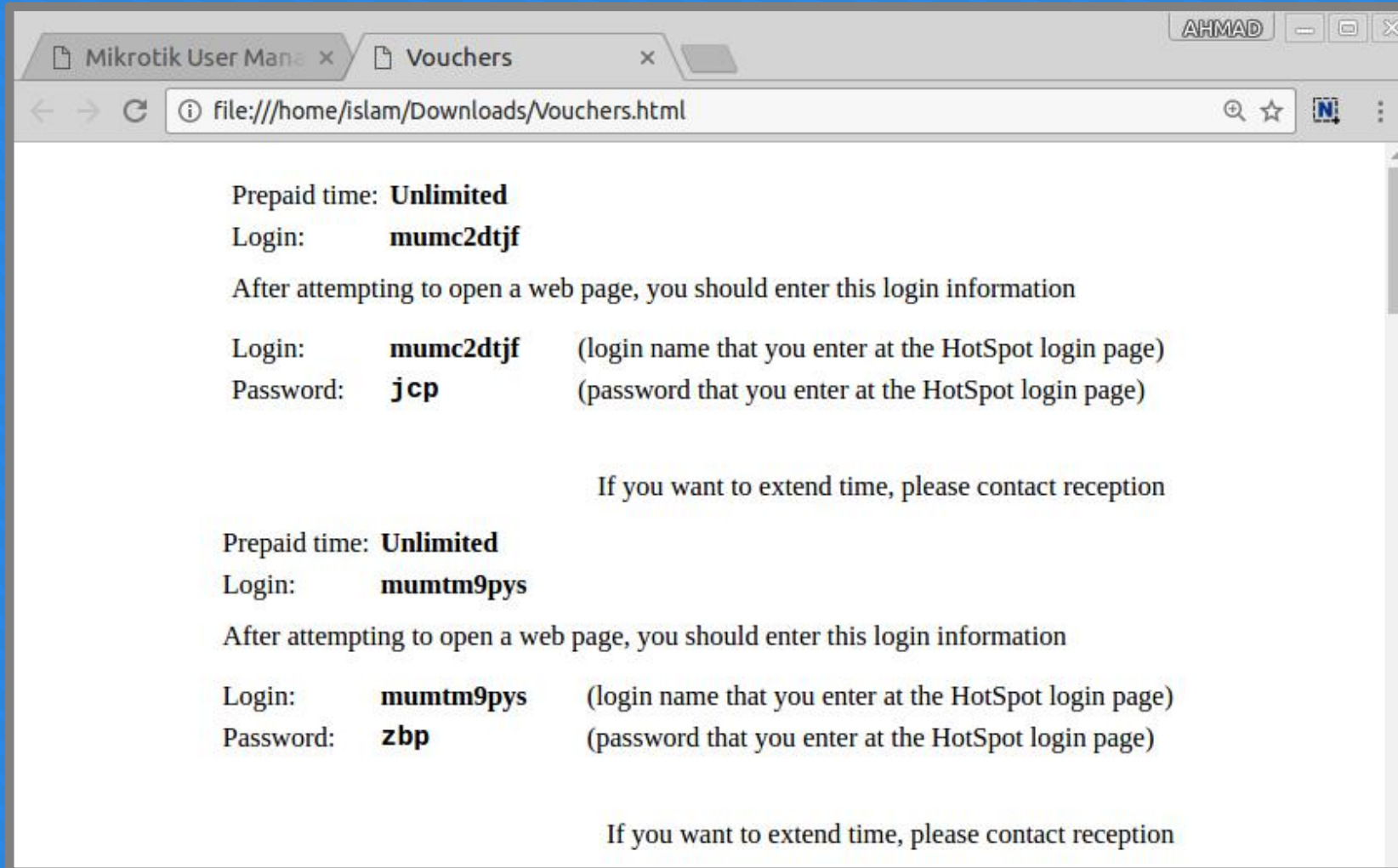


The screenshot shows the Mikrotik User Manager web interface. The left sidebar contains a menu with options: Routers, Users, Sessions, Customers, Logs, Payments, Profiles, Settings, Reports, 0 A sessions, 0 A users, Advanced search, Maintenance, and Logout. The 'Users' option is selected. The main content area displays a table of users with columns: Username, Till time, Total time left, and Actual profile. The 'Generate' button is visible in the top right corner. A 'Vouchers' dialog box is open, showing a 'Break after' dropdown set to 'None' and a 'Download as file' checkbox checked. The 'Generate' button is also present in the dialog box.

Username	Till time	Total time left	Actual profile
mumc2dtjf	Unlimited	Unlimited	profile 512
mumtm9pys	Unlimited	Unlimited	profile 512
mumruerzb	Unlimited	Unlimited	profile 512
mumht9ggg	Unlimited	Unlimited	profile 512
mum4e33wr	Unlimited	Unlimited	profile 512
mum6fz2zs	Unlimited	Unlimited	profile 512
mumstac9b	Unlimited	Unlimited	profile 512
mumzntfwd	Unlimited	Unlimited	profile 512
mumxgwptr	Unlimited	Unlimited	profile 512
mumqvvizx	Unlimited	Unlimited	profile 512

generate
vouchers
for users

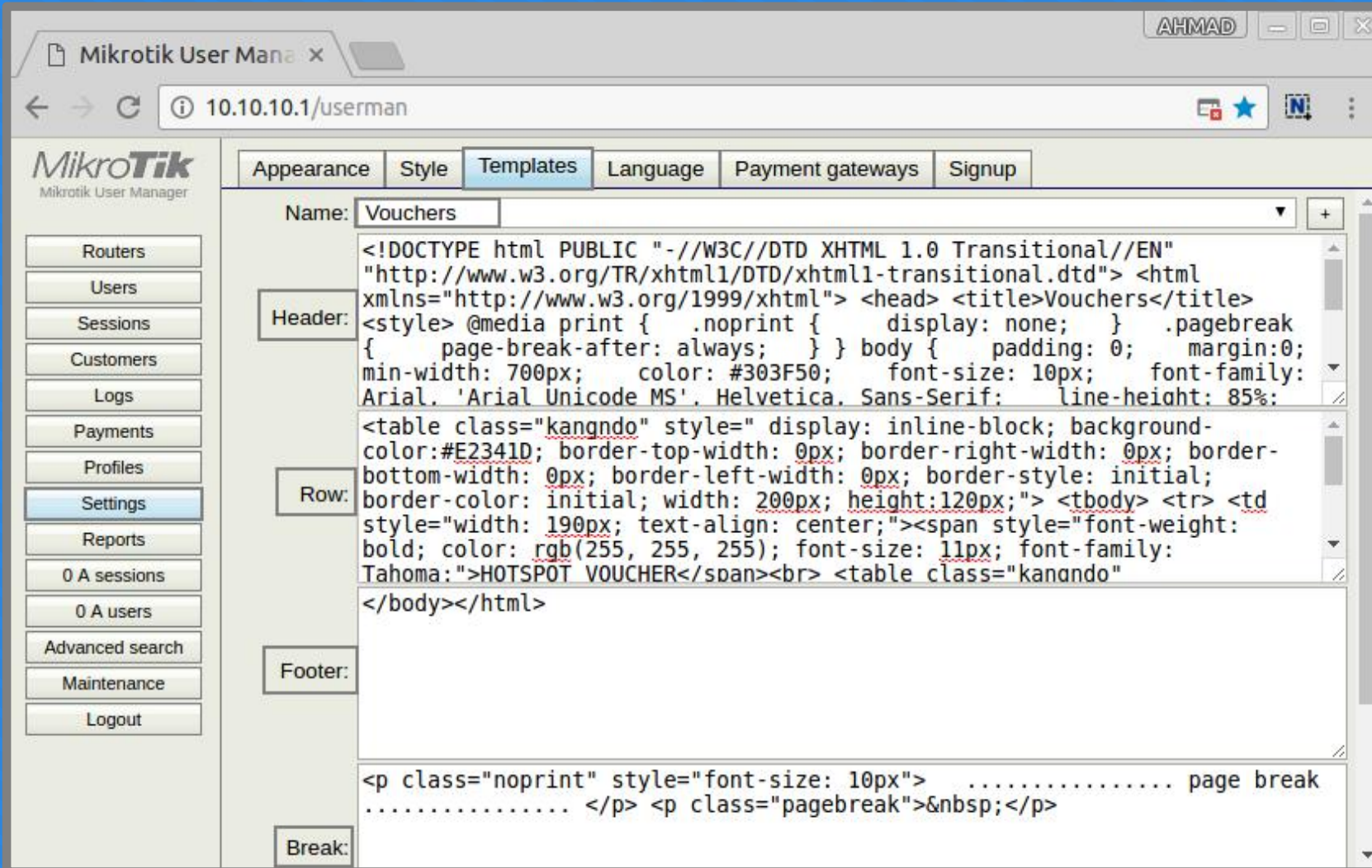
Configuring User Manager <continue>



the result
of vouchers

Configuring User Manager

<continue>



The screenshot shows the Mikrotik User Manager web interface. The browser address bar displays `10.10.10.1/userman`. The user is logged in as AHMAD. The interface has a sidebar with navigation links: 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 has tabs for Appearance, Style, Templates (selected), Language, Payment gateways, and Signup. Under the Templates tab, the 'Name' dropdown is set to 'Vouchers'. The 'Header' section contains HTML code for the voucher header. The 'Row' section contains HTML code for the voucher row. The 'Footer' section contains HTML code for the footer. The 'Break' section contains HTML code for a page break.

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 { .noprint { display: none; } .pagebreak
{ page-break-after: always; } } body { padding: 0; margin:0;
min-width: 700px; color: #303F50; font-size: 10px; font-family:
Arial, 'Arial Unicode MS', Helvetica, Sans-Serif; line-height: 85%;
```

Row:

```
<table class="kangndo" style=" display: inline-block; background-
color:#E2341D; border-top-width: 0px; border-right-width: 0px; border-
bottom-width: 0px; border-left-width: 0px; border-style: initial;
border-color: initial; width: 200px; height:120px;"> <tbody> <tr> <td
style="width: 190px; text-align: center;"><span style="font-weight:
bold; color: rgb(255, 255, 255); font-size: 11px; font-family:
Tahoma:">HOTSPOT VOUCHER</span><br> <table class="kanando"
```

Footer:

```
<p class="noprint" style="font-size: 10px"> ..... page break
..... </p> <p class="pagebreak">&nbsp;</p>
```

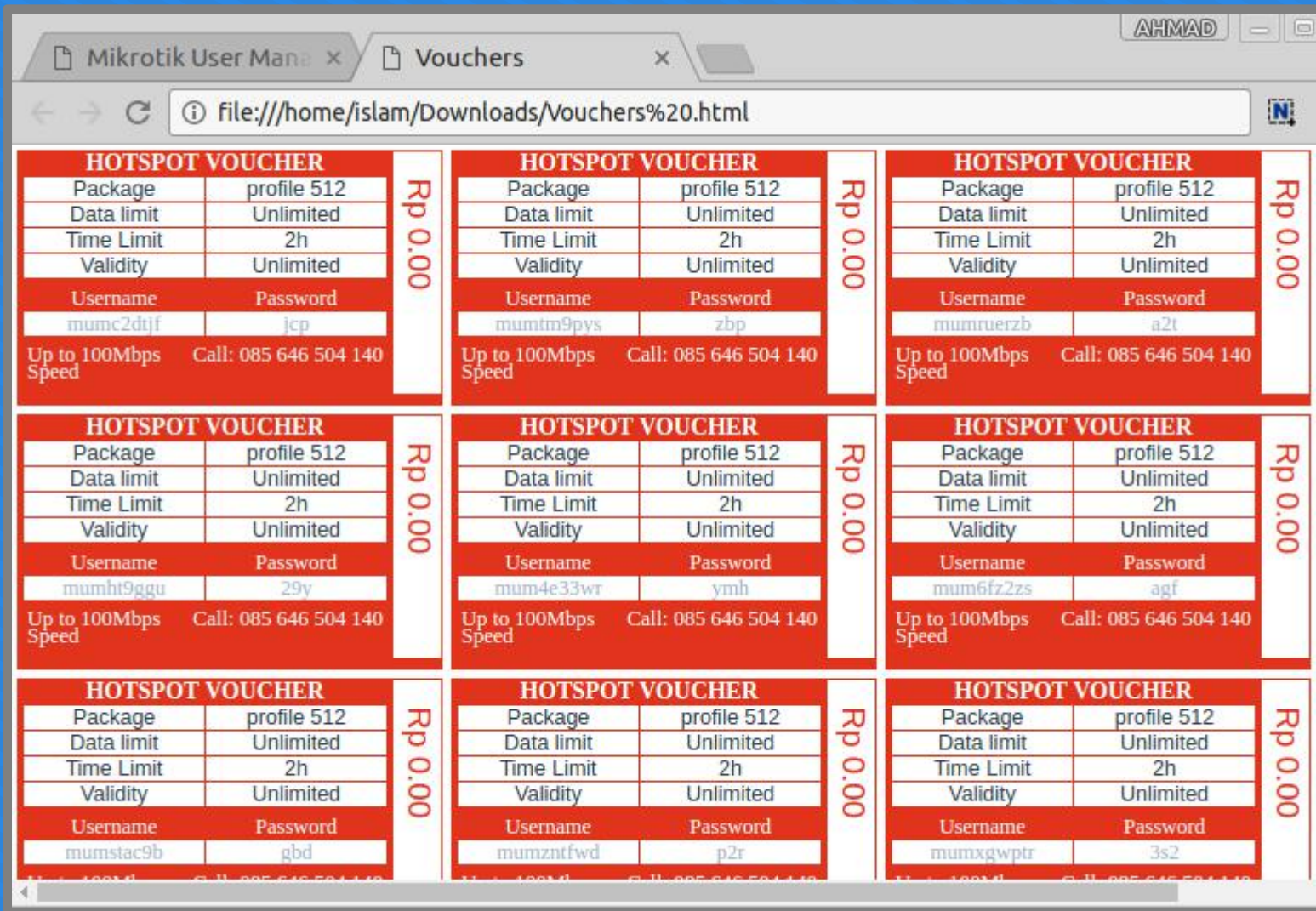
Break:

Change vouchers template.

You can download voucher template from internet

Configuring User Manager

<continue>



The screenshot shows a web browser window with the address bar displaying 'file:///home/islam/Downloads/Vouchers%20.html'. The page title is 'Mikrotik User Manager Vouchers'. The user 'AHMAD' is logged in. The page contains a grid of 9 'HOTSPOT VOUCHER' cards, each with a value of 'Rp 0.00'. Each card lists the following details:

HOTSPOT VOUCHER	
Package	profile 512
Data limit	Unlimited
Time Limit	2h
Validity	Unlimited
Username	Password
mumc2dtjf	jcp
Up to 100Mbps Speed	
Call: 085 646 504 140	

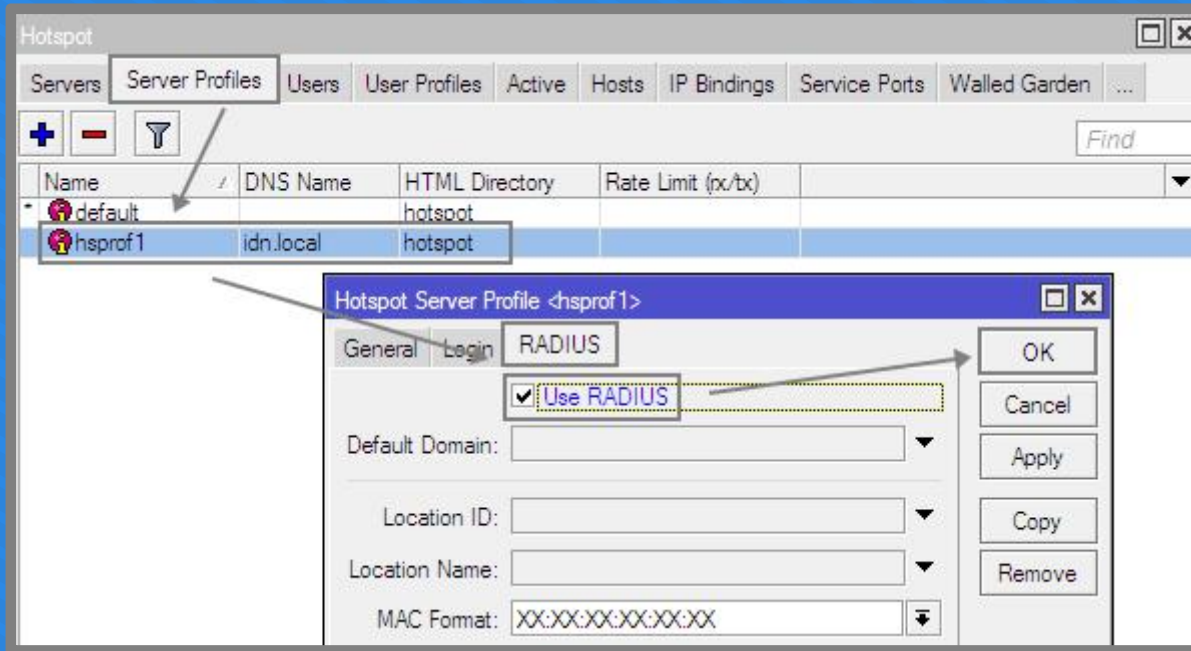
The vouchers are arranged in a 3x3 grid. The usernames and passwords for each voucher are as follows:

Voucher ID	Username	Password
1	mumc2dtjf	jcp
2	mumtm9pys	zbp
3	mumruerzb	a2t
4	mumht9ggu	29y
5	mum4e33wr	ymh
6	mum6fz2zs	agf
7	mumstac9b	gbd
8	mumzntfwd	p2r
9	mumxgwptr	3s2

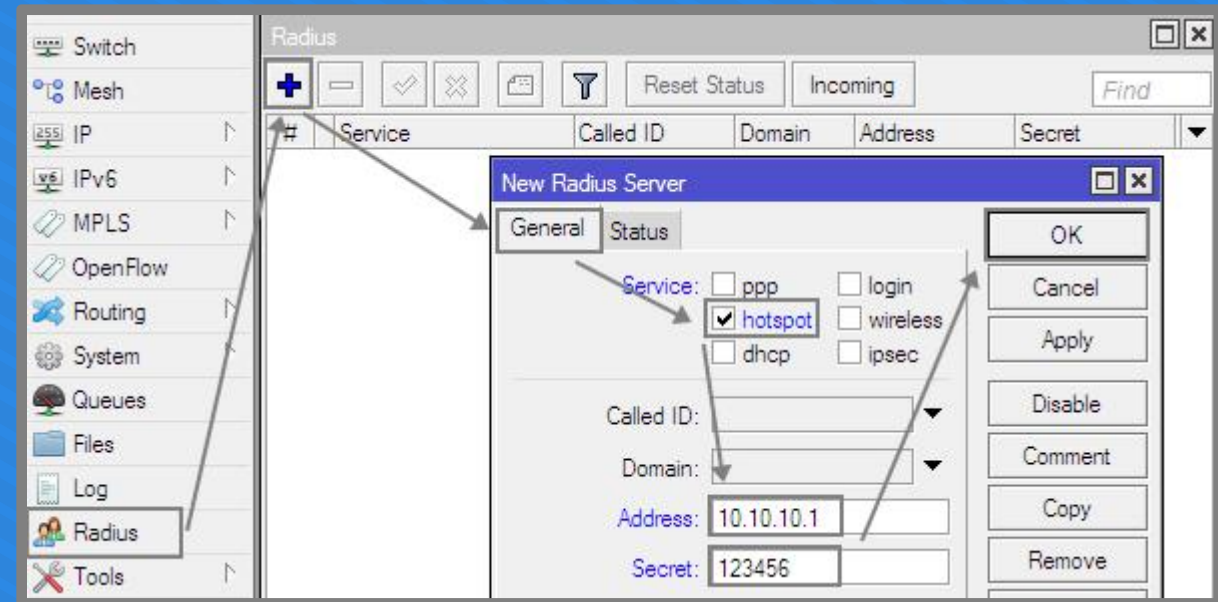
Vouchers after
change the
template

Look more beauty
right??

R1 & R2 Configuration



connecting hotspot
server to user manager



Testing!!

Let's try to login with one of user from vouchers

Please log on to use the internet hotspot service

login

mumc2dtjf

password

...

OK

HOTSPOT GATEWAY
powered by **MikroTik**

Powered by MikroTik RouterOS

Welcome mumc2dtjf!

IP address:	192.168.1.253
bytes up/down:	1808 B / 426 B
connected / left:	2m5s / 1h57m55s
status refresh:	1m

log off

Configuration Again!!

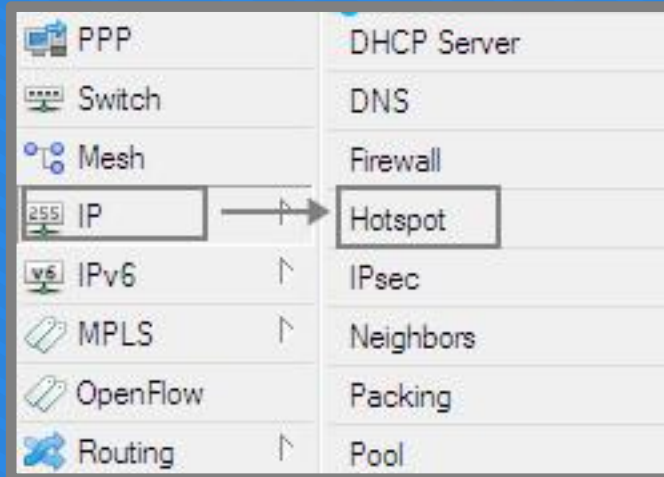
Change hotspot
login template

The screenshot displays the WinBox v6.38.1 interface for a MikroTik hAP lite device. The left sidebar contains a menu with options: Quick Set, CAPsMAN, Interfaces, Wireless, Bridge, PPP, Switch, Mesh, IP, IPv6, MPLS, OpenFlow, Routing, System, Queues, Files, Log, Radius, Tools, and New Terminal. The main area shows a file explorer view of the 'hotspot login' directory. A 'Copy' button is visible over a folder icon. A 'File List' window is open, showing a table of files and directories within the 'hotspot login' directory.

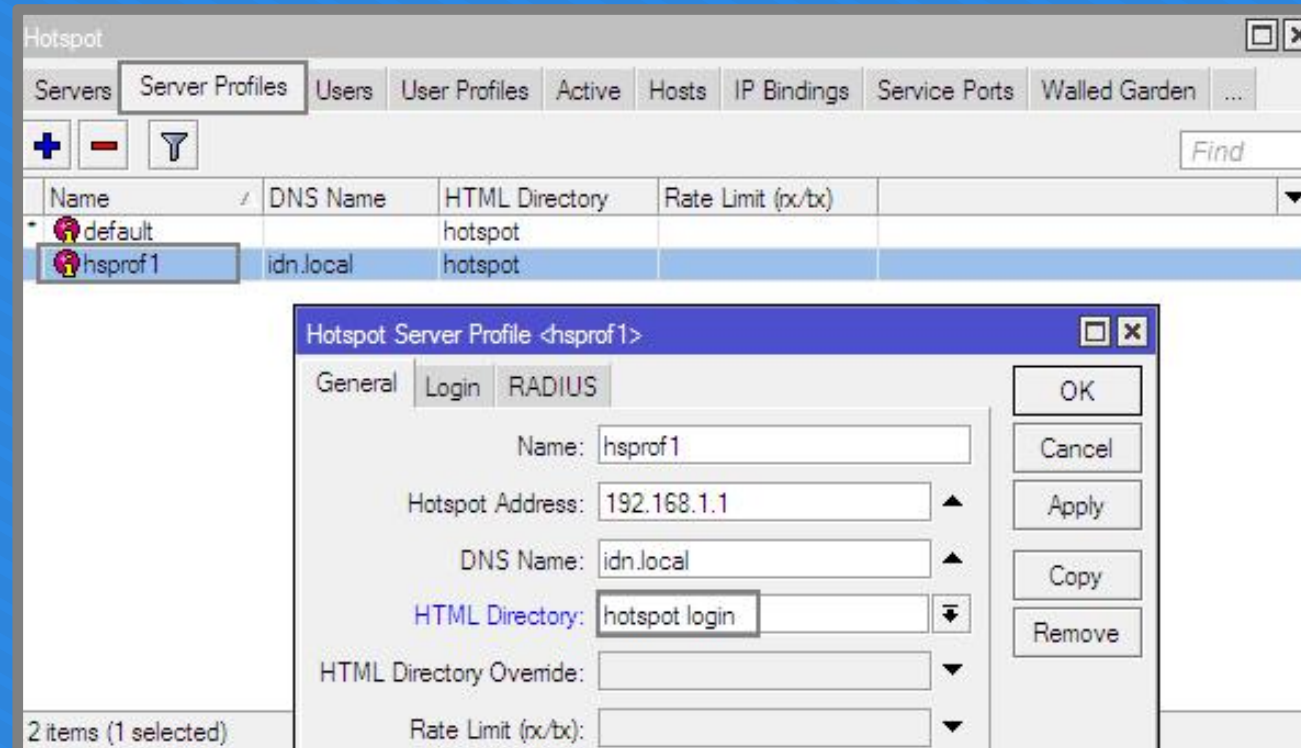
File Name	Type	Size	Creation Time
hotspot/xml/login.html	.html file	530 B	Jan/02/1970 00:30:47
hotspot login	directory		Jan/02/1970 00:55:28
hotspot login/alogin.html	.html file	2460 B	Jan/02/1970 00:55:29
hotspot login/error.html	.html file	898 B	Jan/02/1970 00:55:29
hotspot login/errors.txt	.txt file	3615 B	Jan/02/1970 00:55:29
hotspot login/login.css	.css file	2062 B	Jan/02/1970 00:55:29
hotspot login/login.html	.html file	2237 B	Jan/02/1970 00:55:29
hotspot login/logo.png	.png file	82.2 KiB	Jan/02/1970 00:55:29
hotspot login/logout.html	.html file	1813 B	Jan/02/1970 00:55:29
hotspot login/md5.js	.js file	7.0 KiB	Jan/02/1970 00:55:29
hotspot login/radvert.html	.html file	1481 B	Jan/02/1970 00:55:29
hotspot login/redirect.html	.html file	318 B	Jan/02/1970 00:55:29
hotspot login/rlogin.html	.html file	850 B	Jan/02/1970 00:55:29
hotspot login/status.html	.html file	3009 B	Jan/02/1970 00:55:29
skins	directory		Jan/01/1970 00:00:02

45 items (1 selected) | 8.6 MiB of 16.0 MiB used | 46% free

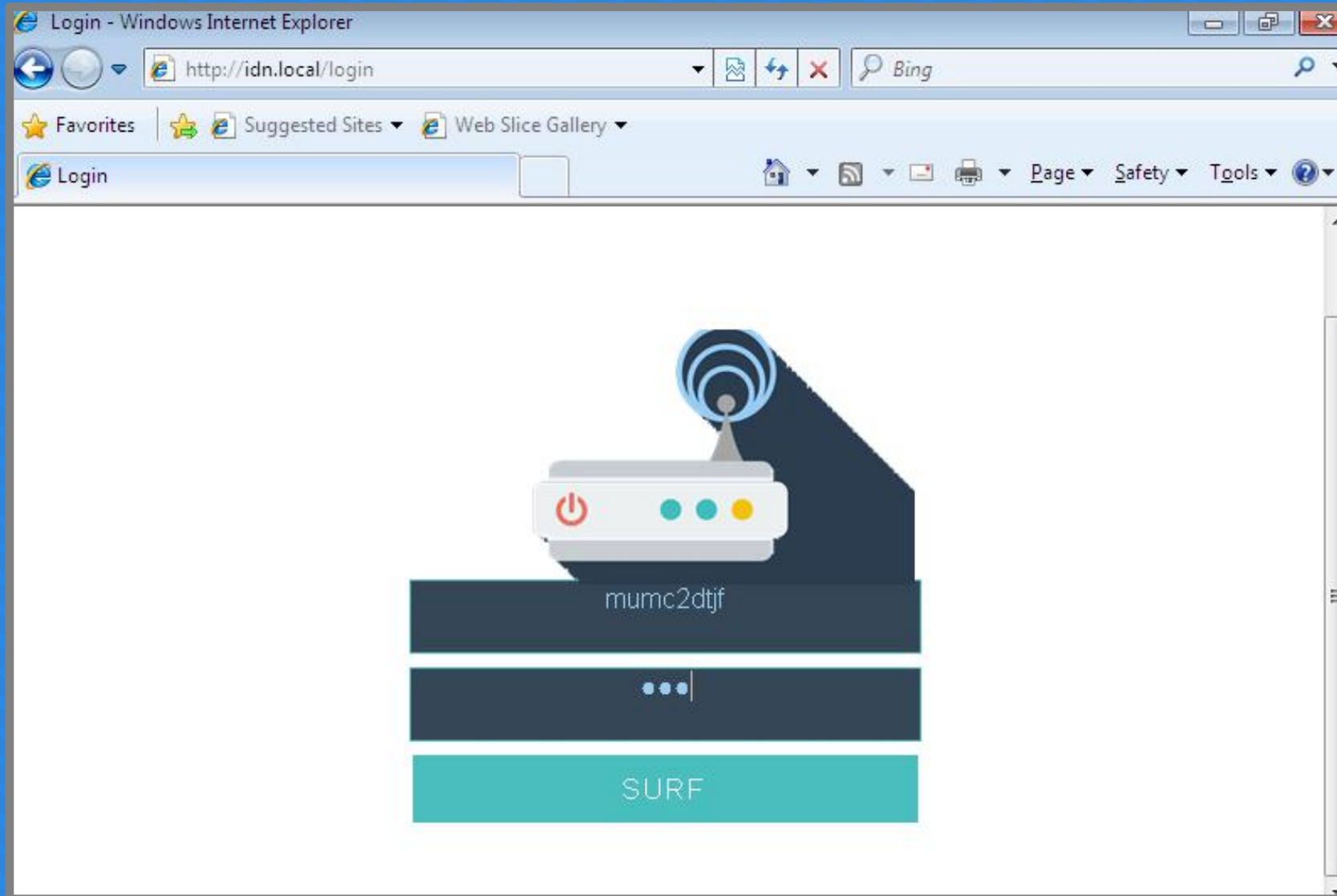
Configuration Again!!



Change hotspot
login template



Let's Try Again!



Login page is
chaged by new
template!!

Thank You!

fb.com/ahmadrosidkomarudin

WA/Telegram +6285 646 504 140

ahmadrosid30121997@gmail.com

