MikroTik System on PC

- 1. WAN configuration
- 2. LAN configuration
- 3. DHCP Server
- 4. Hotspot system
- 5. Firewall configuration (Protect router, Protect LAN, Bit torrent, P2P and Web Content blocked)
- 6. User man

Network Diagram



Helcome to MikroTik Router Software installation

Move around menu using 'p' and 'n' or arrow keys, select with 'spacebar'. Select all with 'a', minimum with 'm'. Press 'i' to install locally or 'q' to cancel and reboot.

[X]	system
[X]	ppp
[X]	dhcp
[X]	advanced-tools
[X]	calea
[X]	gps
[X]	hotspot

[X] ipv6 [X] isdn [X] kvm [X] lcd [X] Mpls [X] Multicast [X] ntp [X] routerboard [X] routing [X] security [X] ups [X] user-manager [X] wireless

ppp (depends on system): Provides support for PPP, PPTP, L2TP, PPPoE and ISDN PPP.

Do you want to keep old configuration? [y/n]:_

WARNING: couldn't keep config - current license does not allow that Creating partition...... Formatting disk... installed system-5.20 installed wireless-5.20 installed user-manager-5.20 installed user-manager-5.20 installed security-5.20 installed routing-5.20 installed routerboard-5.20 installed ntp-5.20 installed multicast-5.20 installed kvm-5.20 installed kvm-5.20 installed isdn-5.20 installed isdn-5.20 installed doe-5.20 installed doe-5.20

```
installed system-5.20
installed wireless-5.20
installed user-manager-5.20
installed ups-5.20
installed security-5.20
installed routerboard-5.20
installed nutticast-5.20
installed multicast-5.20
installed Mp1s-5.20
installed kvm-5.20
installed isdn-5.20
installed ipv6-5.20
installed gps-5.20
installed gps-5.20
installed dhcp-5.20
installed gps-5.20
installed dhcp-5.20
installed dhcp-5.20
installed monced-tools-5.20
installed ppp-5.20
```

Make IP address for LAN

- 1. Login MikroTik system:
 - a. User: admin
 - b. Password:
- 2. Input "setup" and Enter
 - a. Select "a" and Enter
 - b. Enable interface: ether1 and Enter
 - c. Input "172.27.0.1/16" and Enter
 - d. Ipput "x" and Enter
- 3. Login **winbox** program

🛇 WinBox v3.0rc6 (Addresses)							
File Tools							
Connect To: Login: Password: Session: Note: Group:	172.27.1.1 admin <own> ▼ Browse Add/Set Connect</own>	 ✓ Keep Password ✓ Secure Mode ✓ Autosave Session Open In New Windo 					

4. Services Disable

interraces							
Wireless							
Bridge							
PPP							
Mesh							
IP	1	ARP					
IPv6	1	Accounting					
MPLS	4	Addresses					
Routing	4	DHCP Client					
System	1	DHCP Relay					
Queues		DHCP Server					
Files		DNS					
Log		Firewall					
Radius		Hotspot					
Tools	Þ	IPsec					
New Termin	al	Neighbors					
ISDN Chann	nels	Packing					
KVM		Pool					
Make Supou	ıt.rif	Routes					
Manual		SMB	10.0				
Exit		SNMP	1P 50				
		-				1	FI
		Services		Name	Port	Available From	Certificate
		Services Socks	X		- (/ 0		
		Services Socks TFTP	X	⊕ ftp	21		
		Services Socks TFTP Traffic Flow	X X X	⊕ ftp ⊕ ssh	21		
		Services Socks TFTP Traffic Flow UPnP	X X X X	 e spi e ftp e ssh e telnet e winbox 	21 22 23 8291		
		Services Socks TFTP Traffic Flow UPnP Web Proxy	X X X X	ftp ssh telnet winbox www	21 22 23 8291 80		

5. Change password for Admin



6. rename LAN card name in "Interfaces" menu

Interfaces	Interface List		
	Interface Disanat Fall Turned IP Turned CRE Turned VI	MAN MODD Basting LTE	
		VENN VHAF BUILDING LIE	Find
	Name / Type L2 MTU Tx	Tx Rx Tx Pac Rx Pac Tx Drops Rx Drops Tx Errors Rx Errors	▼
	R SAWAN Ethemet 13.	13.4 kbps 4.3 kbps 3 5 0 0 0 0	
	Interface <lan></lan>	Interface <wan></wan>	
	General Ethemet Status Traffic	OK General Ethemet Status Traffic OK	
	Name: LAN	Cancel Name: WAN Cancel	
	Type: Ethemet	Apply Type: Ethemet Apply	
	MTU: 1500	Disable Disable Disable	
	L2 MTU:	L2 MTU: Comment	
	Max L2 MTU:	Max L2 MTU:	
	AAC Address: 00:17:9A:37:08:C7	MAC Address: 00:1D:92:E6:06:98	
	ARP: enabled	Blink ARP: enabled F Blink	
		Reset MAC Address Reset MAC Address	ress
	enabled running slave	link ok enabled running slave link ok	

7. Create WAN and LAN IP in Address List



8. Create DNS

Interfaces					
Wireless					
Bridge					
PPP					
Mesh					
IP 🗅 🗅	ARP				
IPv6 D	Accounting				
MPLS 👘	Addresses				
Routing D	DHCP Client				
System 🗅	DHCP Relay				
Queues	DHCP Server				
Files	DNS				
Log	Firewall	DNS Settings			
Radius	Hotspot	Servers:	203.144.128.194	\$	ОК
Tools D	IPsec		119.46.78.194	¢	Cancel
New Terminal	Neighbors		8888		Apply
ISDN Channels	Packing	Dunamia Canuma		Ť.	
KVM	Pool	Dynamic Servers:			Static
Make Supout.rif	Routes		✓ Allow Remote Requests		Cache
Manual	SMB	Max UDP Packet Size:	4096		
Exit	SNMP	Cache Size:	2048	КiВ	
	Services	Cache Used:	8		
	Socks		·	_	
	TFTP				
	Traffic Flow				
	UPnP				
	Web Proxy				

9. Create "Routes"

Interfaces					
Wireless					
Bridge					
PPP					
Mesh					
IP 🗅	ARP				
IPv6 D	Accounting				
MPLS 🗅	Addresses	Pouto List			5
Routing D	DHCP Client	Portes N // D / MD5			
System D	DHCP Relay	Notices Nexthops Rules VRF			-1
Queues	DHCP Server			Find all	F
Files	DNS	Dst. Address / Gateway	Distar	nce Routing Mark Pref. Source	-
Log	Firewall	AS > 0.0.0.0/0	reachable WAN	1	-
Radius	Hotspot	DAC MAN reachabl	e	0 110.170.50.194	
Tools 1	IPsec	DAC P1/2.27.0.0/16 LAN reachable		0 1/2.2/.1.1	-
New Terminal	Neighbors				
ISDN Channels	Packing	Route <0.0.0.0/0>			
KVM	Pool	General Attributes			ОК
Make Supout.rif	Routes	Dst. Address: 0.0.0.0/0			Cancel
Manual	SMB	Gateway:	▼ reachable WAN		Apply
Exit	SNMP				
	Services	Check Gateway:			Disable
	Socks	Type: unicast		T	Comment
	TFTP	3 items			Сору
	Traffic Flow	Distance: 1			Remove
	UPnP	Scope: 30			
	Web Proxy	Target Scope: 10			
		Routing Mark:		→	
		Pref. Source:			
		enabled	active	static	

10. Open "New Terminal" and Test ping "google.com"

Log		
Radius		
Tools D		
New Terminal		
ISDN Channels	Terminal	
KVM		+
Make Supout.rif		
Manual	MMM MMM KKK TITTTTTTTT KKK	
Exit	MMMM MMM MMM TIT KKK KKK DEBEBER 000000 TTT TIT KKK KKK	
	MMM MM MMM III KKKKK RRR RRR 000 000 TTT III KKKKK	
	MMM MMM III KKK KKK RRRRR 000 000 TTT III KKK KKK	
	MMM MMM III KKK KKK RRR RRR 000000 TTT III KKK KKK	
	MikroTik RouterOS 5.21 (c) 1999-2012 http://www.mikrotik.com/	
	[admin@MikroTik] > ping google.com	
	HOST SIZE TTL TIME STATUS	
	61.19.2.222 56 57 14ms	
	61.19.2.222 56 57 13ms	
	61.19.2.222 56 57 15ms	
	<pre>sent=3 received=3 packet-loss=0% min-rtt=13ms avg-rtt=14ms max-rtt=15ms</pre>	
	[admin@MikroTik] >	•

11. DHCP server Configuration



12. NAT configuration

Interfaces			
Wireless			
Bridge			
PPP			
Mesh			
IP D	ADD	Feed	
IPv6 N	Accounting 1	Fiber Bules NAT Manufe Service Ports Connections Address Lists Lawer/Protocols	
MPLS N	Addresses		
Routing 1	DHCP Client		
System	DHCP Balay	T Action Unan Src. Address [Proto] Src. Fort Ust. Fort in. Inter[Udt. int] Src. Fort Ust. Fort in. Inter] Ust. Fort in. Inter] Vol. Int. Inter]	
Queues	DUCP Server		
Files	DNS	General Advanced Extra Action Statistics OK General Advanced Extra Action Statistics 6	ок
100	Desual	Chain: scrus T Cancel Action: masquerade T	Cancel
Badius	Hotopot	Src. Address 122 27.0.0/16 2 A Apply add det to address list	Apply
Toole	Rese	Det Address ist	
New Terminal	Nelekkee	Disable µmp	Disable
ISDN Changele	Neighbors	Protocol: Comment 5 masquende	Comment
KV/M	Packing	Src. Pot: Copy Desting the sector of the sec	Сору
Males Super 4 of	Pool	Remove redirect	Remove
Marce Support II	Houtes	same	
Manual	SMB	Any. Port: Y Reset Counters src.nat Res	set Counters
EXIL	SNMP	In. Interface: Reset All Counters	at All Counters
	Services	🔰 🚫 d. Interface: 🗆 WAN 🔵 3	
	Socks		
	TETP	Packet Mark:	
	Traffic Flow	Connection Mark:	
	UPnP	Routing Mark:	
	Web Proxy	Bouting Table:	
		Connection Type:	

13. Queue List configuration



14. Internet access testing



15. Hotspot Configuration

Safe Mode			Hotspot 40
Interfaces		Fotnest R	Servers Server Profiles Users User Profiles Active Hosts IP Bindings S
Wreless		Servers Server Polies Users User Polies Active Hosts IP Bindros Service Pots Waled Garden Wilded Garden IP List	+ - 7
Bridge		+ m of S Y Rest HTML Hater Step	Name / DNS Name HTML Directory Rate Limit (outs)
PPP		Name / Interface Address Dad Datifia Addresse	• edult hotapot
Mesh		Hated Stup	@haprof1 hotapot
P P	ARP	Hotpot Setup Tel X Hotpot Setup Tel X DNS name of local Hotpot server	Hotapot Server Profile chaprof 1>
IPv6	Accounting	Select interface to sun Hot Spot on Set Hist Spot address for interface DNS Name	General Login RADIUS 15K
MPLS F	Addresses	HatSpat Interface: UNN Local Address of Network: 172223117/6	- Login By Cancel
Routing P	DHCP Client	Masquerade Network	MAC Cookie 14
System P	DHCP Relay	lack Net Cancel	WITTP CHAP HTTPS
Queues	DHCP Server	Book Net Cancel Book Net Cancel	Copy
Hes	DNS		MAC Auth. Paseword: Remove
Log	Frewal		HTTP Cookie Lifetime: 3d 00:00:00
Radus	Hotspot 1	Hotspot Setup 🖝 🖬 Hotspot Setup	SSI Catificata: anna Z
Tools	IPsec	Select hotspot SSL certificate Deate local HitSpot user	2 terrs (1
ISON Chappele	Neighbore	Address Pool of Network: 12/2/2/15/2/2/16 Select Certificate: rove Region Address Pool of Network: 12/2/2/15/2/2/16	Split User Domain
KVM	Packing	172 27.1.2.172 27.255 254	Trial Uptime Limit: 00:30:00
Make Scout of	Poul	5	Trial Listime Reset: 14 00:00:00
Manual	CMD	Back Not Cancel Back Net Cancel Back Net Cancel	Trial I have Deville - data at T
Ext	CNMP		ina con rivie. weak
	Services		
	Socks	Hotopol Setup Integration Setup	defa.A.
	TETP	Setter Statution Server Polies Uses Use Profiles Active Hosts IP B	n .
	Traffic Row	IP Address of SMTP Server: 10005	
	UPnP	119.45.78.194 Rame / Peterface Address Pool Peter	le Addresses
	Web Proxy		52 Z
		Prospot setup	
		Setup has completed successfully	
		11 🐨	

16. Create profile & First Hotspot User

	lots	pot ·	16											
Ľ	Sen	ver Profiles	User	s User Profiles	Active	Hosts	IP Bind	ings	Service Ports	Walled Garden	Walled Gard	en IP List	Cookies	
17	4	- /	83	T	o Reset	All Cour	nters						F	ind
		Server	A	Name	A	ddress		MA	C Address	Profile	Uptime			•
H		vity all		admin						default	00:00:00			
		New Hotspo	t Use	er										
L		General L	imits	Statistics			2	1 0	к					
L		Serv	ver: [hotspot1	18	₹		Can	cel					
		Nan	ne: [ball 19				Арр	ply					
L		Passwo	ord:	20				Disa	ble					
L		Addre	ss:			-		Comr	ment					
L		MAC Addre	ss: [1.6. 5				Co	ру					
L		Prot	ile: [default		•		Rem	ove					
ľ	1 ite	Four	es:[Res	et All	Counters					
		C11	aii. [•								
		enabled	_											

17. Internet access testing for hotspot

	63A%2F%2Fgoogle.com%2F ♀ ♥ ♥ ♥ @ internet hotspot > login ×	ይን እን የስ
ile Edit View Favorites Tools Help		🗙 🍕 Convert 🔻 🗾 Select
🖇 S เช็ดราดาสินด้า Thesystem		
	Latviski	
	Please log on to use the internet hotspot service	
		🥔 mikrotik hotspot > status - Int 💷 💷 💻
		Attp://172.27.1.1/status
	login ball	Welcome ball!
		IP address* 172 27 0 251
	password	bytes up/down: 4.1 KiB / 14.2 KiB
	OK	connected: 0s
		status refresh: 1m
	Hotspot gateway	
	powered by MikroTik	log off
	Powered by MikroTik RouterOS	

- 18. Firewall configuration (Protect router, Protect LAN)
 - Go to internet web browser
 - Input IP: 172.27.1.1/cfg
 - Input user name & password

A A A A A A A A A A A A A A A A A A A	
← < />	
File Edit View Favorites Tools Help	
Admin 2 •••• 3 Log in 4	
	ρ· →
File Edit View Favorites Tools Help	
System Interfaces Firewall Routes Queues	PPPoE DHCP Upgrade
	Firewall Public interface: WAN V Protect router: V 3 Protect LAN: V NAT: V Apply 4

- Automatic create new filter rules in firewall.

Interfaces	Firewall										
Wireless	Filter Rules NAT Mangle Service F	orts Connectio	ns Address Lists Layer7 Pr	otocols							
Bridge	+- * * 🗂 🍸 00	Reset Counter	s 00 Reset All Counters								
PPP	# Action	Chain	Src. Address	Dst. Address	Protocol	Src. Port	Dst. Port	In. Inter	Out. Int	Bytes	Packets
Mesh	::: Added by webbox										
in 4 N	0 V accept	input			1 (icmp)					2453.7 KiB	41 862
IP I	::: Added by webbox										
IPv6	1 Vaccept	input						WAN		262.7 MiB	196 062
MPLS N	::: Added by webbox										-
MI 20	2 Vaccept	input						WAN		0 B	0
Routing D	;;; Added by webbox										
System D	3 🗙 drop	input						WAN		309.7 KiB	3 844
-,	::: Added by webbox									0000 4 140	0.000 504
Queues	4 🖓 jump	forward						WAN		3308.1 MiB	2 603 564
Files	Added by webbox	a set a second								2205 7 140	2 500 024
Log	J V accept	customer								SOUD.7 MIB	2 000 834
LUG	6 Added by webbox	outomer								1/1 9 1/0 0	1 210
Radius	··· Added by webboy	customer								141.0 ND	1210
Tools D	7 X drop	customer								2335 9 K/B	41 520
N T		Cactomor								2000.0140	
New Terminal	8 add src to address list	forward	172.27.0.0/16							146.0 KiB	2 101
ISDN Channels	9 add src to address list	forward	172 27 0 0/16							0 8	0

- 19. Firewall configuration (Bit torrent, P2P and Web Content blocked)
 - Open new terminal

Interfaces	
Wireless	
Bridge	Terminal
PPP	·
Mesh	2
IP D	
IPv6 D	
MPLS 🗅	MM MM KKK TITTTTTTT KKK
Routing D	MMM MMMM MMM III KKK KKK RRRRR 000000 TTT III KKK KKK
System D	MMM MM MMM III KKKKK RRR RRR 000 000 TTT III KKKKK
Queues	MMM MMM III KKK KKK RRR RRR 000000 TTT III KKK KKK
Files	
Log	Mikrolik Routeros 5.21 (C) 1999-2012 http://www.mikrolik.com/
Radius	
Tools D	
New Terminal 1	
ISDN Channels	[admin@MikroTik] >

- input as below and Enter

/ip firewall layer7-protocol

add name=.Bittorrent regexp="^(\\x13bittorrent protocol|azver\\x01\\$|get /scra\ pe\\\?info_hash=get /announce\\\?info_hash=|get /client/bitcomet/|GET /dat\ a\\\?fid=)|d1:ad2:id20:|\\x08'7P\\)[RP]"

- Automatic create new Layer7 Protocols in firewall.

Ю	C* Safe Mode	
	Interfaces	Frewal 2 3
	Wireless	Filter Rules NAT Mangle Service Ports Connections Address Lists Layer? Protocols
	Bridge	Find Find
	PPP	
	Mesh	Bittorrent \u03bittorrent protocollazver\u01Siget /scrape\\u03c7rh0_hash=get /announce\\u03c7rh0_hash=get /clent/bitcomet/IGET /data\\u03c7de] d1ad2id20\u03c7P\][RP]
	IP 1 🗅	
	IPv6 D	
	MPLS D	۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲
	Routing D	
	System 1	

- Input new filter rules in "Terminal program" and change IP address for your system

/ip firewall filter



add action=add-src-to-address-list address-list=-Bit-Addr \ address-list-timeout=1m chain=forward disabled=no dst-address-list=\ !-Bit-Addr-Unblock dst-address-type="" layer7-protocol=.Bittorrent \ src-address=172.27.0.0/16 src-address-list=!-Bit-Addr-Unblock \ src-address-type=local

add action=drop chain=forward disabled=no dst-port=!80,443 protocol=tcp \ src-address-list=-Bit-Addr

add action=drop chain=forward disabled=no protocol=udp src-address-list=\ -Bit-Addr

add chain=forward src-address=<mark>172.27.0.0/16</mark> p2p=all-p2p action=drop comment=p2p_drop

Interfaces	Firewall 2										
Wireless	Filter Rules NAT Mangle Service Port	s Connection	ns Address Lists Layer7 Pro	tocols							
Bridge	+- / × 🖻 🍸 💴	Reset Counters	00 Reset All Counters							Find	all
PPP	# Action	Chain	Src. Address	Dst. Address	Protocol	Src. Port	Dst. Port	In. Inter (Dut. Int	Bytes	Packets
Mesh	::: Added by webbox										
IP 1	0 Vaccept	input			1 (icmp)					2453.9 KiB	41 866
IPv6	1 accept	input						WAN		262 7 MiB	196 206
MPLS N	::: Added by webbox	mpor								202.7 1110	100 200
Paudian N	2 Vaccept	input						WAN		0 B	0
nouting	::: Added by webbox									014.0160	0.010
System 🗅	3 X drop	input						WAN		314.3 NB	3 916
Queues	4 Migump	forward						WAN		3310.9 MiB	2 611 472
Files	;;; Added by webbox		_ _								
	5 🗸 accept	customer								3308.3 MiB	2 565 585
Log	;;; Added by webbox		4	ל ו							
Radius	6 🗸 accept	customer		/ 3						142.0 KiB	1 214
Tools	::: Added by webbox		`	-						0504 0 100	44.070
10000 ····	/ X drop	customer								2501.2 KiB	44 6/3
New Terminal	2 Int add are to address list	forward	172 27 0 0/16							150 / KD	2 255
ISDN Channels	9 dd sic to address list	forward	172.27.0.0/16							0 B	0
KVM	10 X drop	forward			6 (tcp)		180,443			5.1 MiB	103 654
Maka Suport of	11 🔀 drop	forward			17 (udp)					3130.5 KiB	28 648
Make Supput III	;;; P2P_Blocked										
Manual	12 X drop	forward	172.27.0.0/16							81.3 KiB	886

- Automatic create new filter rules in firewall.

- Bit torrent access testing.

Download: 792 kB/s, Upload: 3 kB/s	- BitComet (64-bit) [20150629]												
File View CometID Tools Help													
🗐 🗳 🛄 🏠	000	3 🗙 🔽			ź		a 🗎	۵.	<u>k</u> ()			
HTTP Torrent Magnet Favorites	Start Stop Preview OpenDir Prop	perties Delete Option	s Ho	mepag	e Mo	vies	Music Softwa	re Games	orums Ex	it			
🔆 Channels 🔑 Bookmarks 🛭 💩 IE	[🔄 🦊 🖌 👫 🚱 😓 🕯	🗧 🖬 Tags 🛛 Search	Tasks			Q		Before (reate	new filte	er rules		
All Downloads (1)	Name		VIP	C	S I	P	Size	Progres	5 🕹 D	🔒 U	Time Left	Seeds/Peers[Share
Downloading (1)	Big.Game.2014.1080p.WEBDL.AC3.	.x264.MASTER.mkv	WP				3.41 GB	40.49	5 760kB/s	3kB/s	0:52:55	14/14[30/173]	0.00
Completed													
									4	\sim			
									L				

Download: 0 kB/s, Upload: 0 kB/s - I	BitComet (64-	bit) [20150	629]															
<u>File View CometID Tools H</u> elp																		
🔄 🌍 🜉 🔀 HTTP Torrent Magnet	Start Stop	O Preview	OpenDir .	2 Properties	S Delete	Options	Hor	1 mepa	ge N	dovies	Music Softwar	e Games	Forum	us Exit				
🙀 Channels 🥪 Bookmarks 🛛 🚳 IE	🔄 🔸 🧹	• 👫 🚱	0	N 🕹 1	🗗 Tags	Search T	Tasks			Q	af	tter cre	ate	new	filter	rules	_	
All Downloads (1)	Name						VIP	C	S	P	Size	Progre	ss 🕹	D	💡 U	Time Left	Seeds/Peers[Share
Downloading (1) Completed	🖶 Big.Gam	ne.2014.108	0p.WEBDL	AC3.x264.I	MASTER.r	nkv	WP				3.41 GB	43.7	%	0kB/s	0kB/s	00	16/16[26/173]	0.00
4 Active (1)															ſ	1		

- Web content blocked

Interfaces									
Wireless									
Bridge	Firewall 2								
PPP	Filter Rules NAT Mangle Servic	Firewall Rule 🔿	4					<	
Mesh	+ - * * 7	General Adva	nced Extra Action Sta	atistics			6 ок	Find	all
IP 1 N	Action	Src. Ad	dress List			•	Cancel	ies	Packets
IPv6 D	;;; Added by webbox						Ganoor		
MPLS N	0 Vaccept	Dst. Ad	dress List:			~	Apply	154.0 KiB	41 868
Routing 1	1 Vector	l mor7	Protocol				Disable	62.8 MiB	196 266
System	::: Added by webbox	Layer/							
Overen	2 Vaccept		Content: voutube con	n 5			Comment	0 B	0
Queues	::: Added by webbox			. J			Сору	16 9 KB	3 956
Files	;;; Added by webbox	Connect	ion Bytes:			v	Remove		5 550
Log	4 🕬 jump	Connect	tion Rate:			-	Hemove	11.5 MiB	2 615 168
Radius	;;; Added by webbox	Des Connetiers	Classification				Reset Counters		0.507.500
Tools D	5 V accept	Per Connection	Classifier.			•	Denot All Counterry	08.8 MIB	2 567 590
New Terminal	6 Jaccept	Src. MAC	Address:			•	Reset All Counters	42.0 KiB	1 214
INCW TEITIIIIdi	;;; Added by webbox								
ISDN Channels	7 🔀 drop	customer						2589.1 KiB	46 364
KVM	;;; Bit Torrent download Blocked								
Make Supert of	8 add src to address list	forward	172.27.0.0/16					166.3 KiB	2 346
Make Supour.ni	9 add src to address list	forward	172.27.0.0/16					0 B	0
Manual	10 X drop	forward			6 (tcp)	!80,443		5.3 MiB	109 100
Exit	11 X drop	torward			1 / (udp)			3262.3 KiB	30 093
	12 V drop	forward	172 27 0 0/16					81.3 KiB	886
	··· Say Blocked	TOTWARD	172.27.0.0/10					01.3 ND	600
	13 X drop	forward						245 7 KiB	3 096
	··· Youtube Blocked	lonnara						240.7 100	0 000
	14 × drop	forward						1729 B	7
	15 items (Melecter)								
	Ľ								

20. User man

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- Change port number for WWW service

- Go to web browser
- Input url: 172.27.1.1:800/userman

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