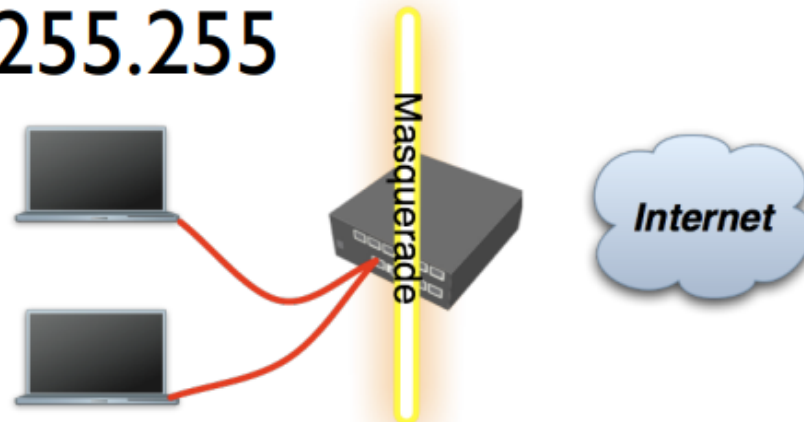


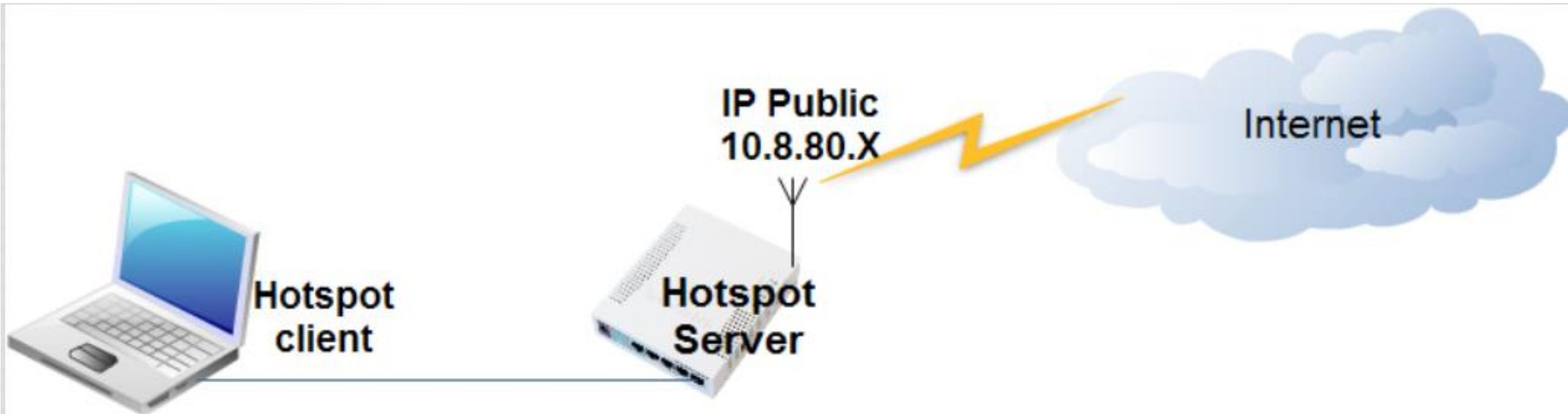
Firewall & Hotspot

By : P.SuLaiMan

Private and Public Space

- **Masquerade** is used for Public network access, where private addresses are present
- Private networks include
10.0.0.0-10.255.255.255,
172.16.0.0-172.31.255.255,
192.168.0.0-192.168.255.255





HotSpot Setup Wizard

Go to Menu
IP > Hotspot

Hotspot

Servers Server Profiles Users User Profiles Active Hosts

+ - ✓ ✕ Filter Reset HTML Hotspot Setup

Name	Interface	Address Pool
------	-----------	--------------

Only need to fill DNS Server

Hotspot Setup

Select interface to run HotSpot on

HotSpot Interface: ether1

1 Back Next Cancel

Hotspot Setup

Set HotSpot address for interface

Local Address of Network: 10.5.50.1/24

☒ Masquerade Network

2 Back Next Cancel

Hotspot Setup

Select hotspot SSL certificate

Select Certificate: none
import other certificate
none

4 Back Next Cancel

Hotspot Setup

Set pool for HotSpot

Address Pool of Network: 10.5.50.2-10.5.50.254

3 Back Next Cancel

Hotspot Setup

Select SMTP server

IP Address of SMTP Server: 0.0.0.0

5 Back Next Cancel

Hotspot Setup

Setup DNS configuration

DNS Servers: 8.8.8.8

6 Back Next Cancel

Hotspot Setup

Create local HotSpot user

Name of Local HotSpot User: admin

Password for the User:

8 Back Next Cancel

Hotspot Setup

DNS name of local hotspot

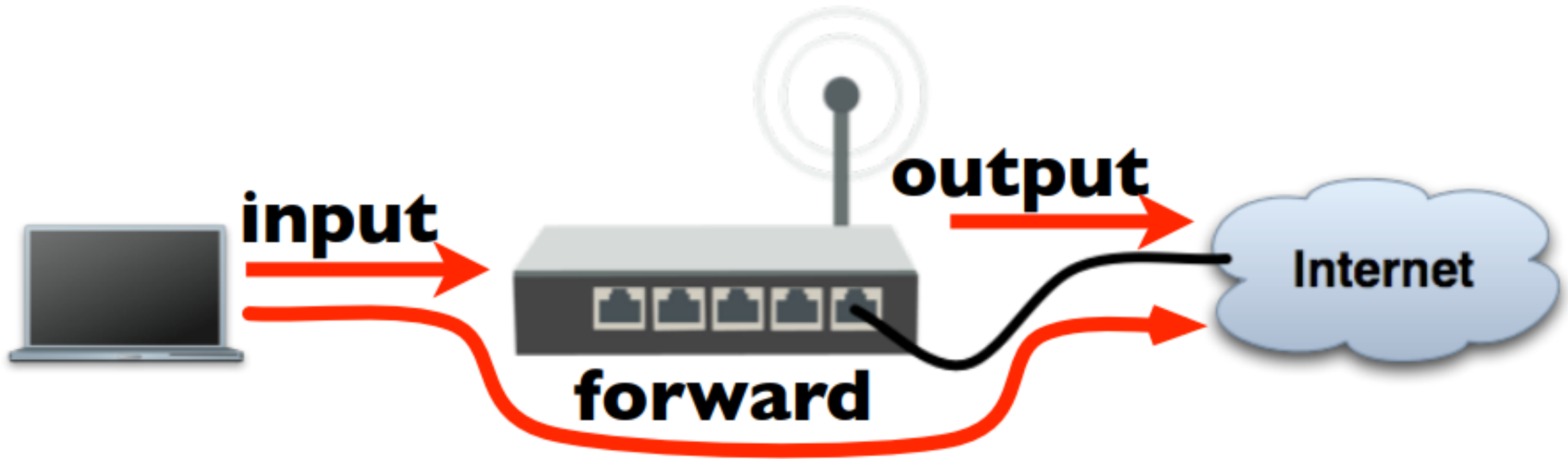
DNS Name:

7 Back Next Cancel

Firewall Rules

- Work on **If-Then** principle
- Ordered in chains
- There are predefined chains
- Users can create new chains

Firewall Filter



Filter Actions

- Each rule has an action - what to do when a packet is matched
- **accept**
- **drop** silently or **reject** - drop and send ICMP reject message
- **jump/return** to/from a user defined chain

Layer 7 Protocols

- Layer 7 Protocols จะค้นหาข้อมูลในรูปแบบ ICMP/TCP/UDP streams
- Layer 7 Protocols จะทำการค้นหา 10 Packets แรกของ Connection หรือ 2KB แรกของ Connection ที่ตรงกับ Pattern ของข้อมูลที่มี
- หากไม่พบข้อมูลที่ตรงกัน Layer 7 Protocols จะถือว่าไม่เข้ากฎหรือไม่ตรงตาม Pattern ที่มี
- ข้อควรระวังในการใช้งาน Layer 7 Protocols จะมีการเรียกใช้ CPU จำนวนมาก

Layer 7 Protocols

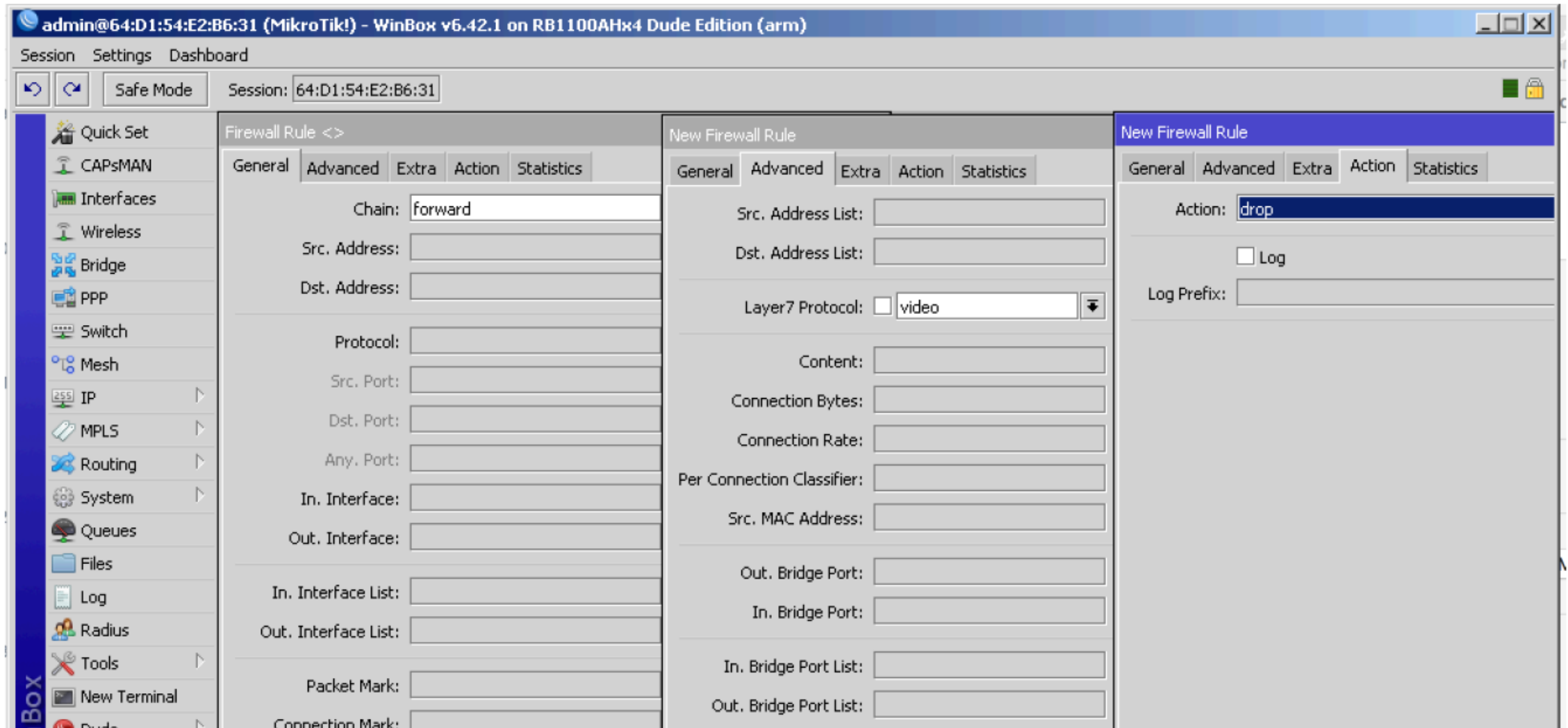
The screenshot shows the WinBox v6.42.1 interface for a MikroTik RB1100AHx4 Dude Edition (arm). The top bar indicates the user is 'admin@64:D1:54:E2:B6:31'. The main menu on the left includes options like Quick Set, CAPsMAN, Interfaces, Wireless, Bridge, PPP, Switch, Mesh, IP, MPLS, Routing, System, Queues, and Files. The central panel is titled 'Firewall' and contains tabs for Filter Rules, NAT, Mangle, Raw, Service Ports, Connections, Address Lists, and Layer7 Protocols. The 'Layer7 Protocols' tab is active, displaying a table with the following data:

Name	Regexp
sysCurFW	3410
sysFWType	ipq8060
sysFacFW	3350
sysIntru	true
sysJail	0
sysR	3
sysROSinit	1
syscret	0987654321
sysload	Start_state2_Norm
syslog	7
video	videoplayback video

A dialog box titled 'Firewall L7 Protocol <video>' is open, showing the configuration for the 'video' protocol. It includes a 'Name' field with the value 'video', a 'Regexp' field with the value 'videoplayback|video', and buttons for OK, Cancel, Apply, Comment, Copy, and Remove.

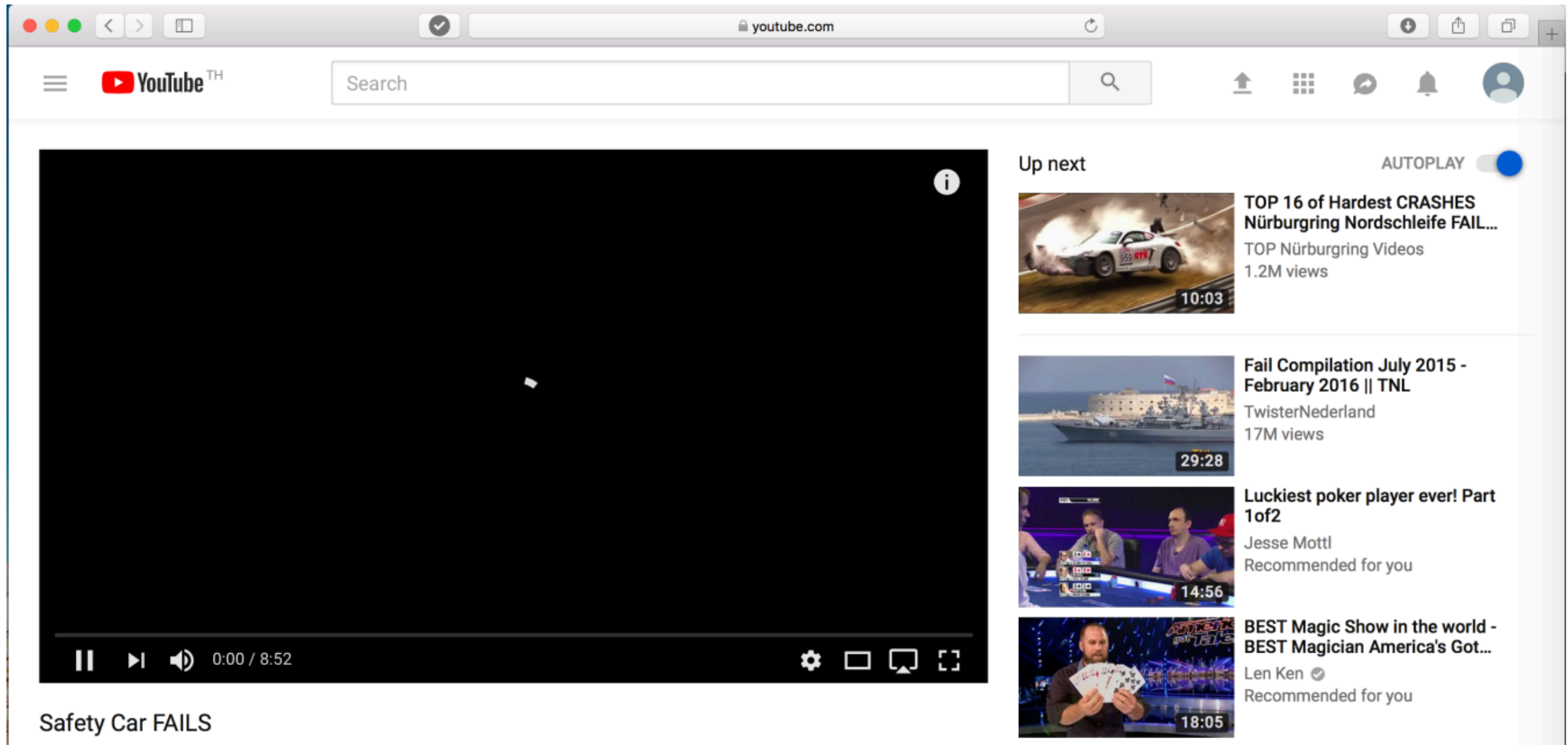
ตัวอย่างการตั้งค่าใน `/ip firewall layer7-protocol`

Layer 7 Protocols



ตัวอย่างการตั้งค่าใน /ip firewall filter

Layer 7 Protocols



ตัวอย่างทดลองเข้าเว็บไซต์

https://wiki.mikrotik.com/wiki/Manual:Securing_Your_Router