رواد مصر الرقمية

وزارة الاتصالات
وتكنولوجيا المعلومات

PROJECT

ADVANCED FORTIGATE SECURITY PROFILES

PROJECT
DOCUMENTATION

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Our Great Team

وزارة الاتصالات وتكنولوجيا المعلومات

Mohamed Abdelaal

Eyad Mahmoud

Arwa Essam

Filopateer Atef

Youssef Yasser

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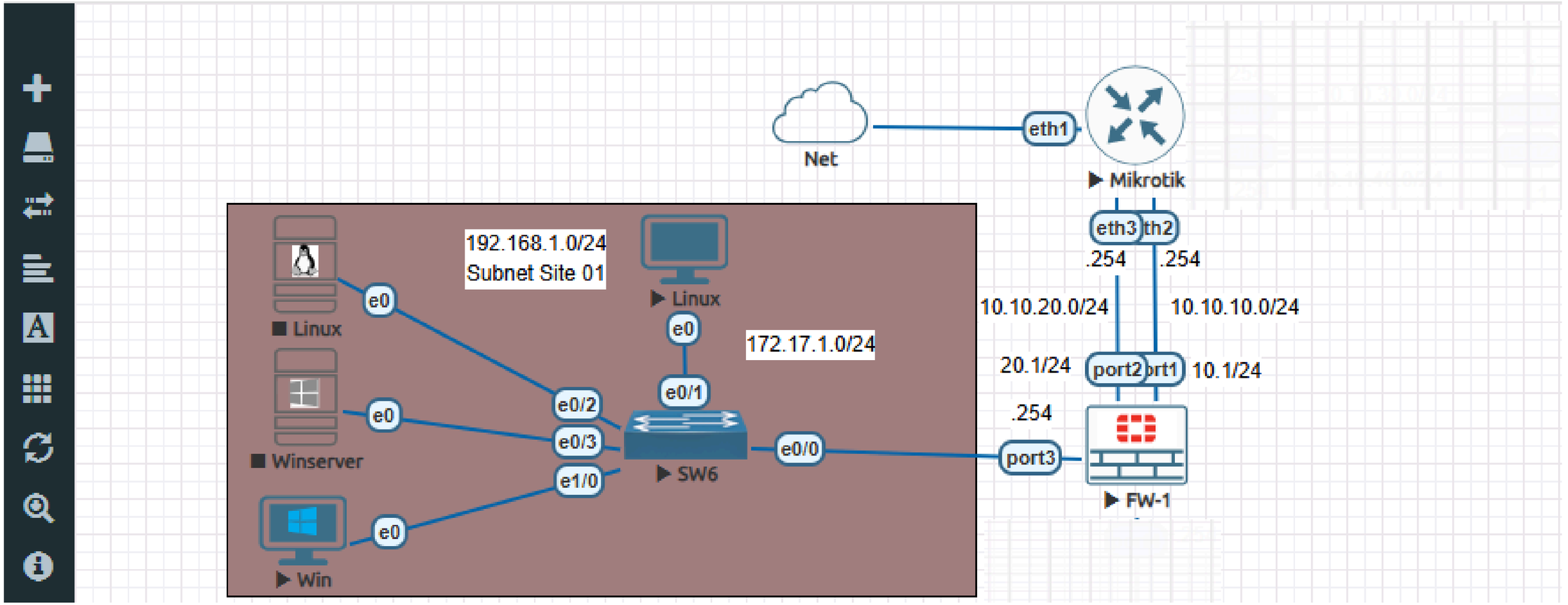
Net
eth1
Mikrotik
eth3
th2
.254
.254
10.10.20.0/24
10.10.10.0/24
20.1/24
port2
rt1
10.1/24
.254
port3
FW-1
192.168.1.0/24
Subnet Site 01
Linux
e0
Linux
e0
172.17.1.0/24
e0/1
e0/2
e0
Winserver
e0/3
e0/0
SW6
e1/0
e0
Win

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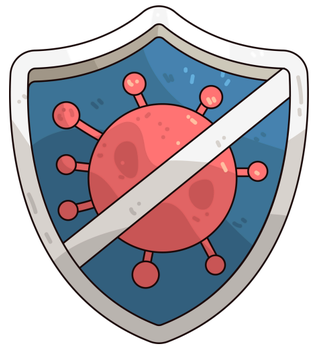
Key Types of Security Profiles



1. Antivirus

- Scans files and data passing through the firewall.
- Blocks viruses, malware, and suspicious downloads.
- Protects users from infected files.

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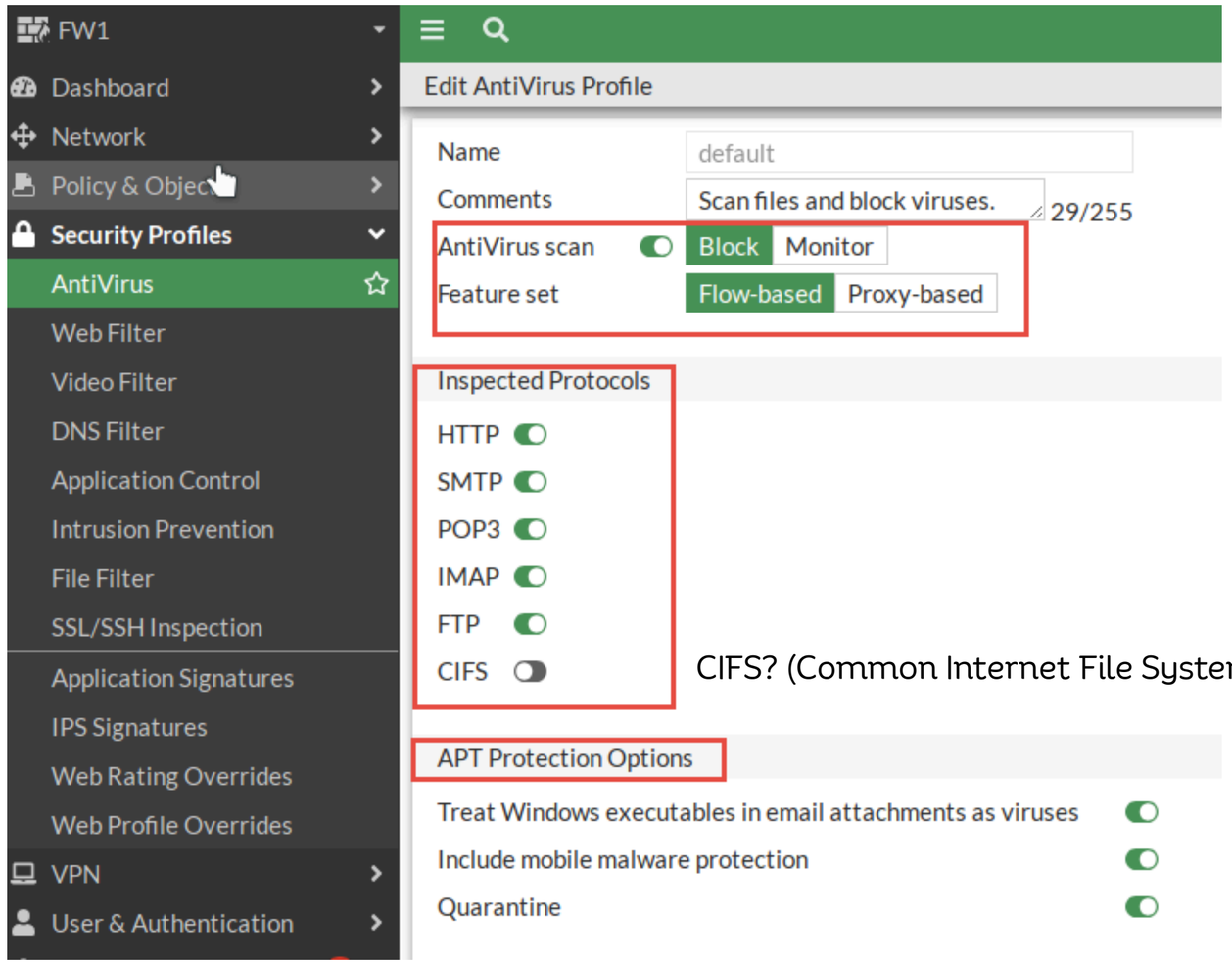
وتكنولوجيا المعلومات

Configuring Flow-Based Antivirus Scanning



CIFS? (Common Internet File System)

APT “Advanced Persistent Threat” = Advanced detection + sandbox + behavior analysis to stop smart, hidden, long-term attacks.

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Apply Flow-Based Antivirus Scanning on Policy

1

Internet Service Database	VLAN_192-to-WAN	vlan_192	WAN-01 (port1)	all

2

- Network
- Policy & Objects
  - Firewall Policy
  - IPv4 DoS Policy
  - Addresses
  - Internet Service Database
  - Services
  - Schedules
  - Virtual IPs
  - IP Pools
  - Protocol Options
  - Traffic Shaping
- Security Profiles
- VPN

Name: VLAN_192-to-WAN
Incoming Interface: vlan_192
Outgoing Interface: WAN-01 (port1)
Source: all
Destination: all
Schedule: always
Service: ALL
Action: ACCEPT | DENY
Inspection Mode: Flow-based | Proxy-based

3

Security Profiles
AntiVirus: AV default
Web Filter
DNS Filter
Application Control
IPS
File Filter
SSL Inspection: SSL certificate-inspection

Logging Options
Log Allowed Traffic: Security Events | All Sessions
Generate Logs when Session Starts
Capture Packets

Comments: VLAN_192-to-WAN 15/1023

Enable this policy

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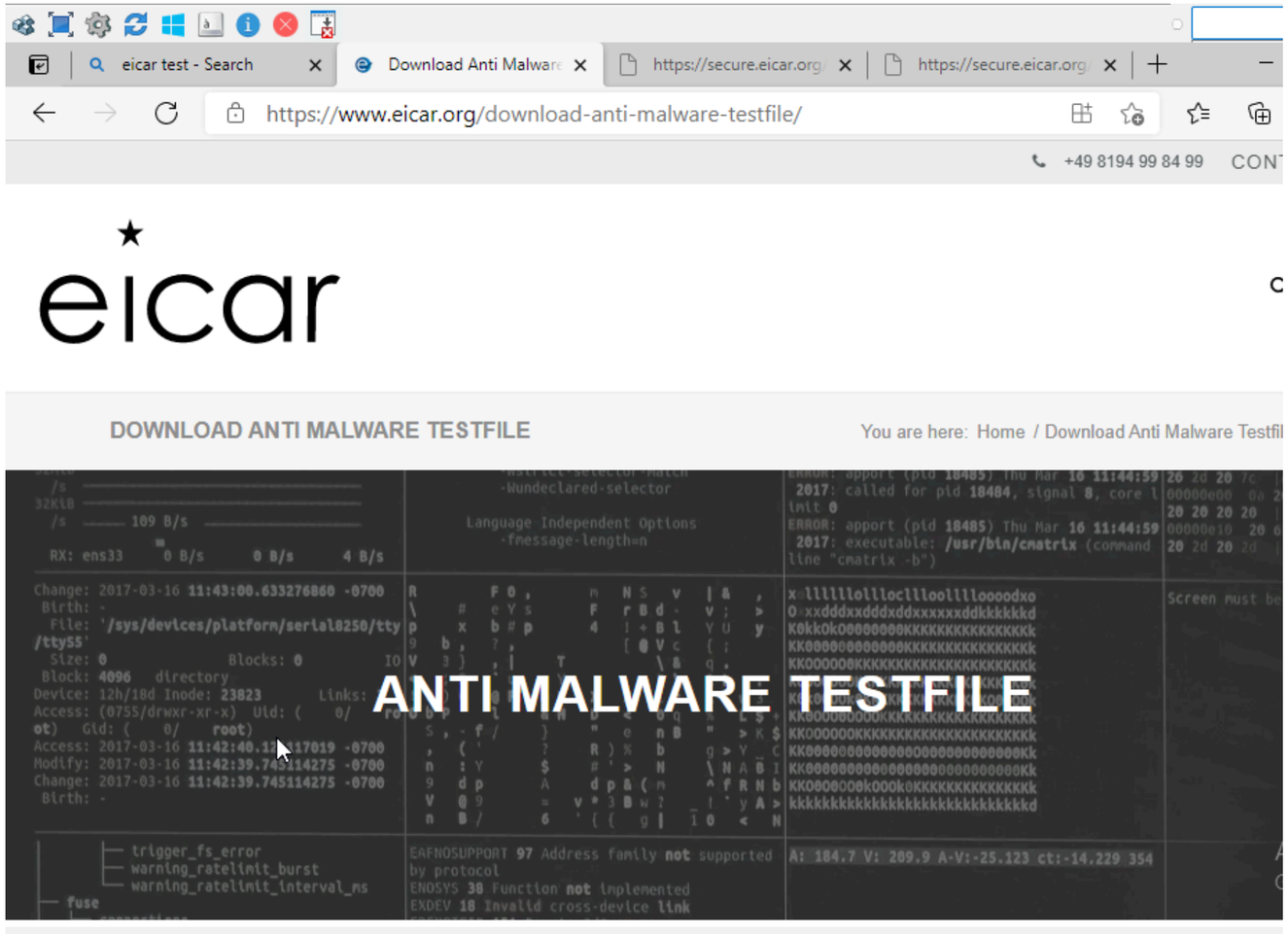
وتكنولوجيا المعلومات

On client Machine test using :



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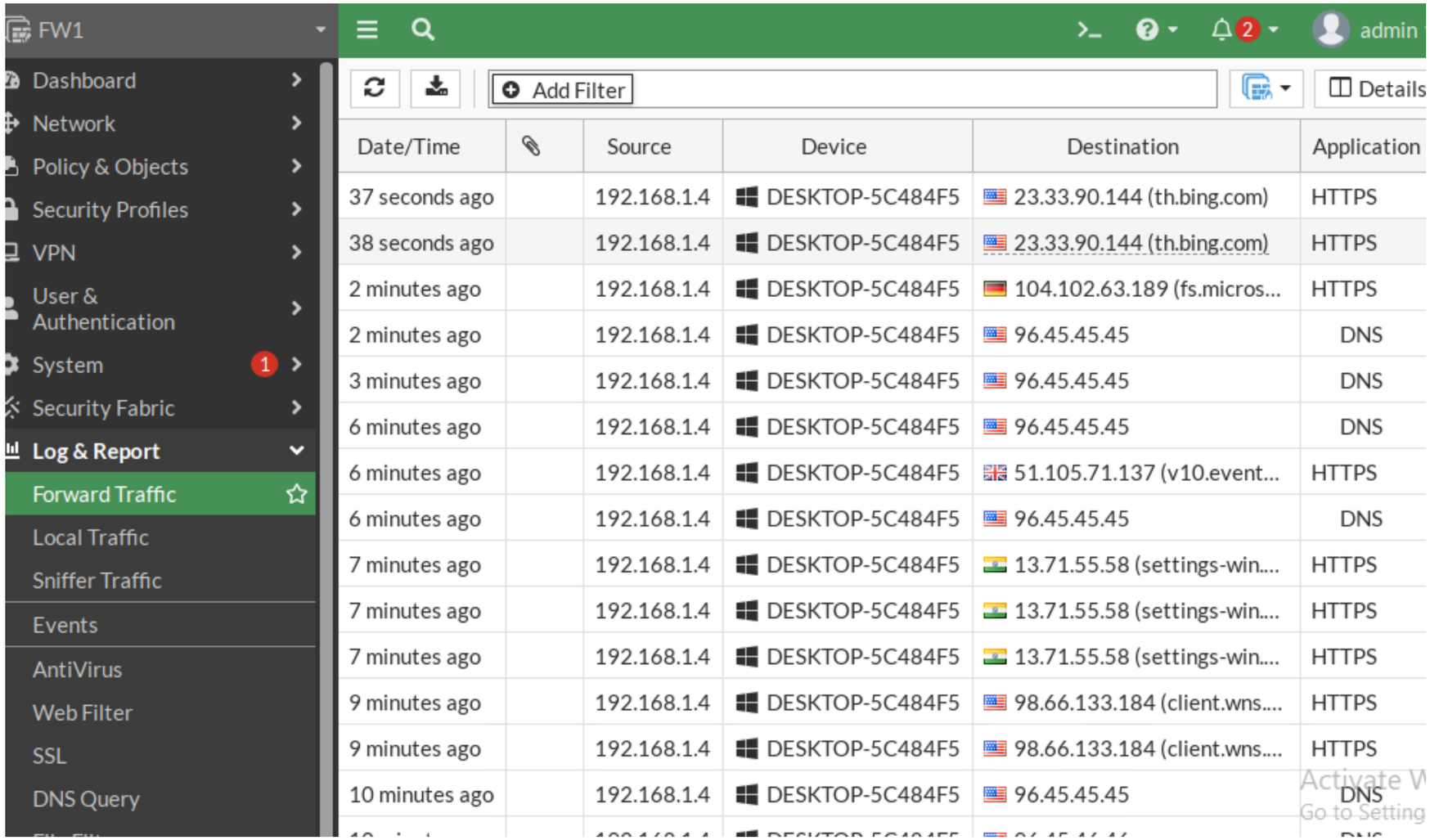
View Logs :



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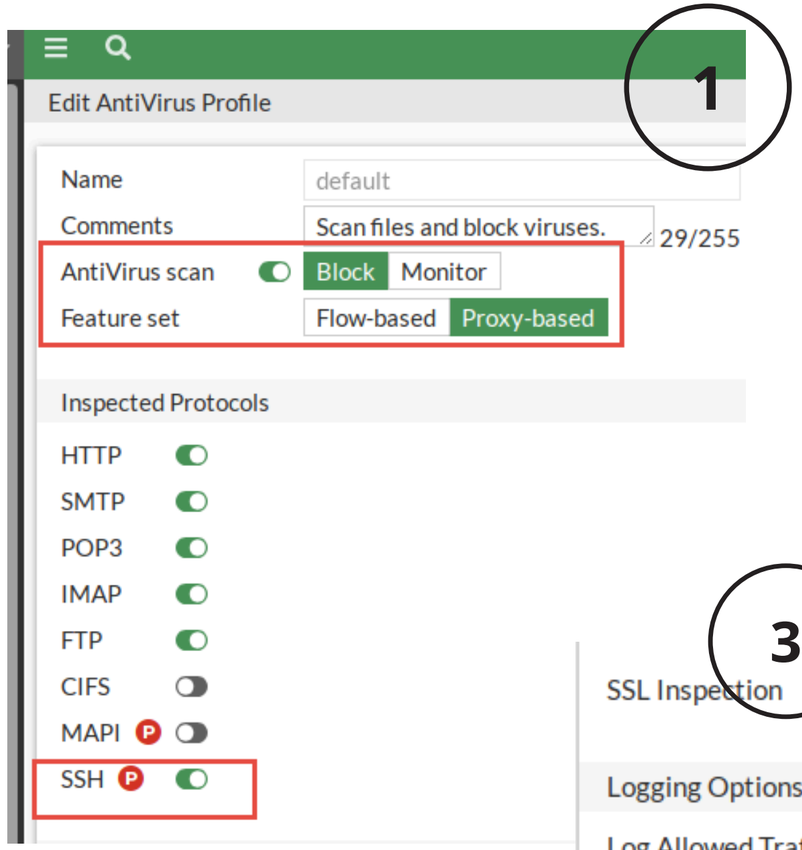
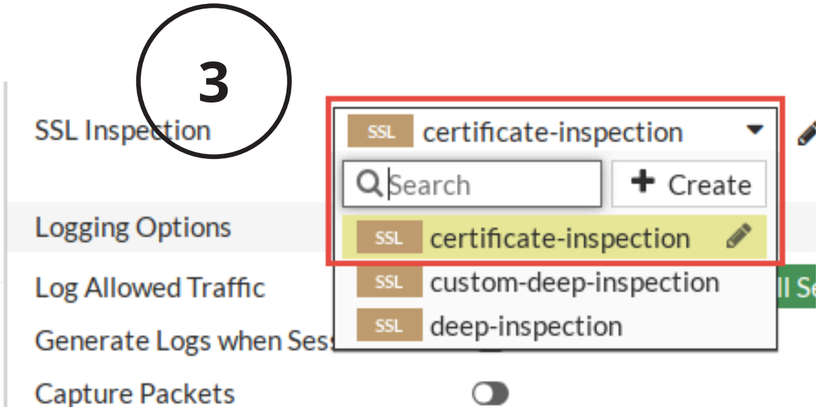
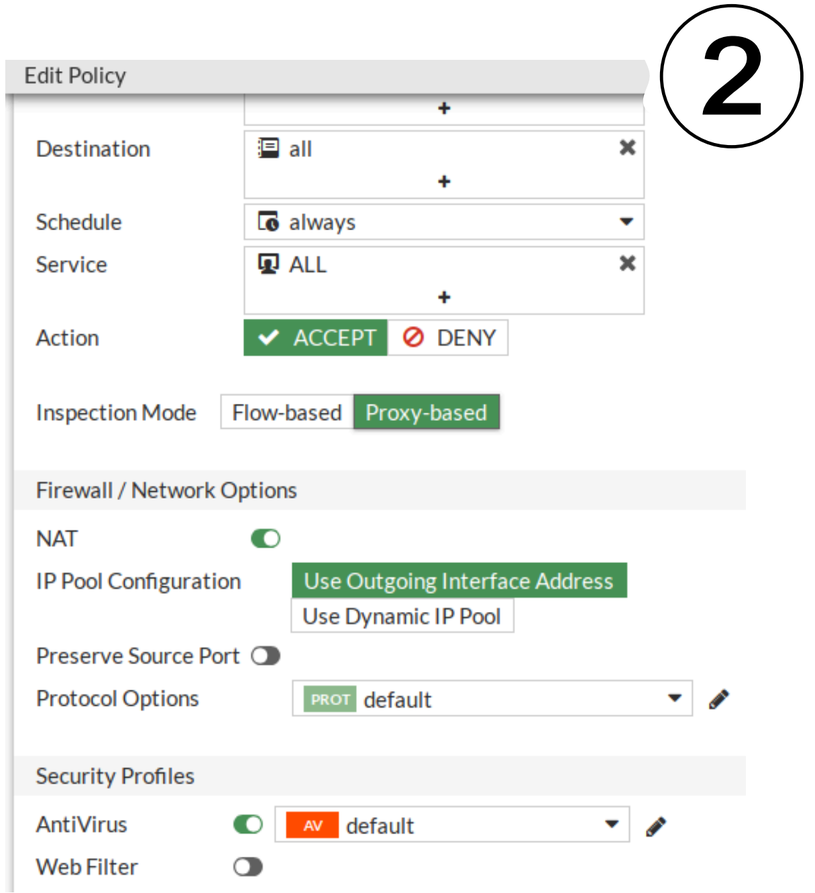
وتكنولوجيا المعلومات

Using Antivirus Scanning in Proxy-Based







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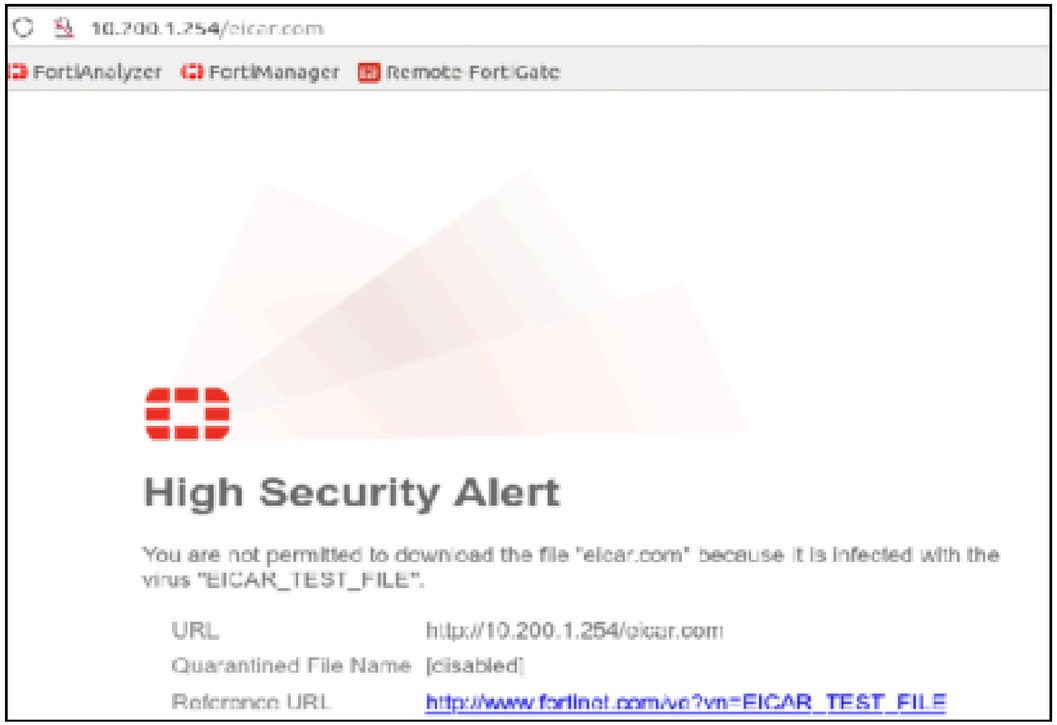
Testing Policy

Download area using the standard protocol HTTP or secure, SSL enabled protocol HTTPS			
eicar.com	eicar.com.txt	eicar_com.zip	eicarcom2.zip

FortiGate should block the download attempt, and insert a replacement message similar to the following example:



FortiGate shows the HTTP virus message when it blocks or quarantines infected files.

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وتكنولوجيا المعلومات

Key Types of Security Profiles

2. Web Filtering

- Controls which websites users can access.
- Can block harmful, inappropriate, or time-wasting websites.
- Helps enforce company internet policies.

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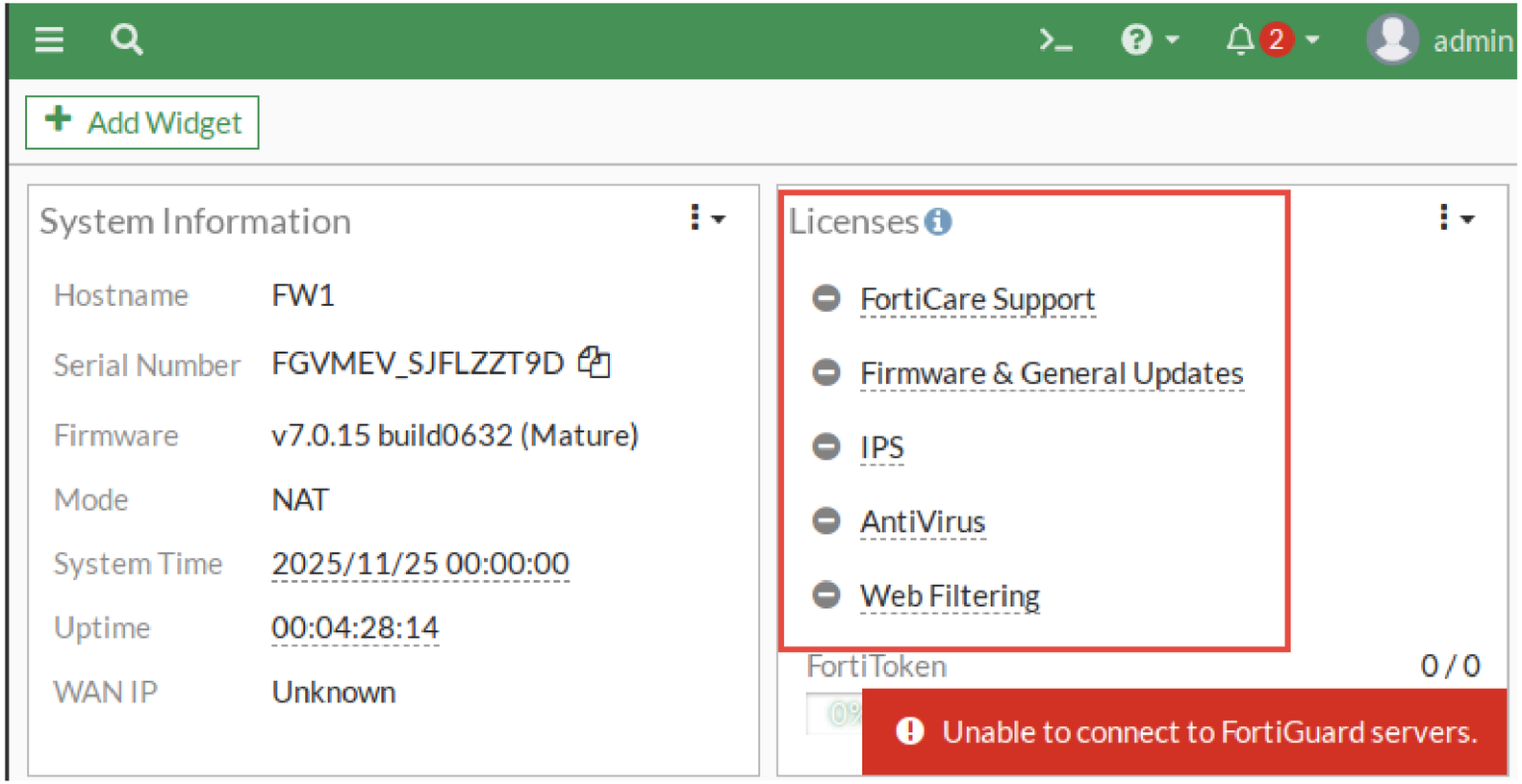
وزارة الاتصالات
وتكنولوجيا المعلومات

Configuring FortiGuard Web Filtering



To configure FortiGate for web filtering based on FortiGuard categories, you must make sure that FortiGate has a valid FortiGuard security subscription license. The license provides the web filtering capabilities necessary to protect against inappropriate websites.

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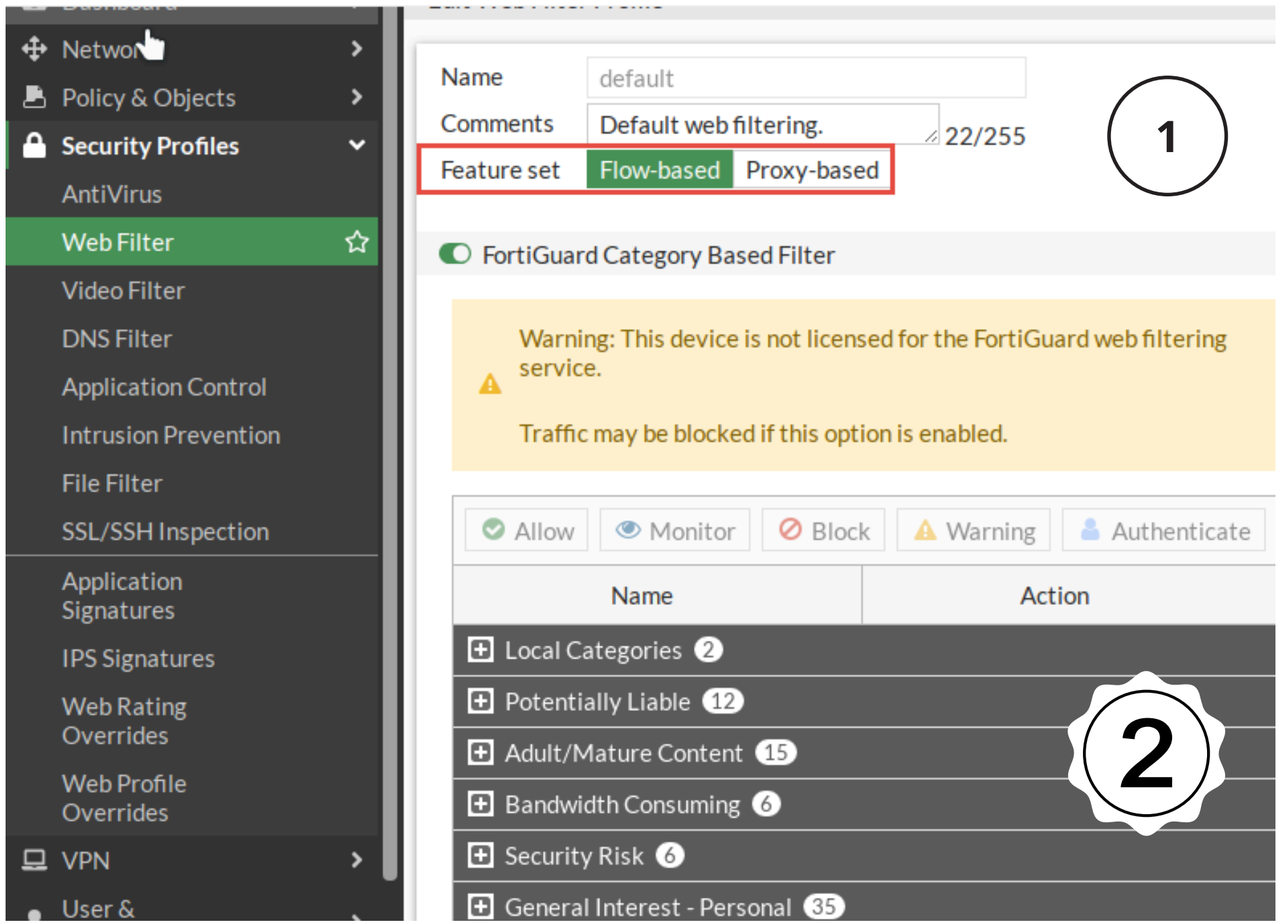
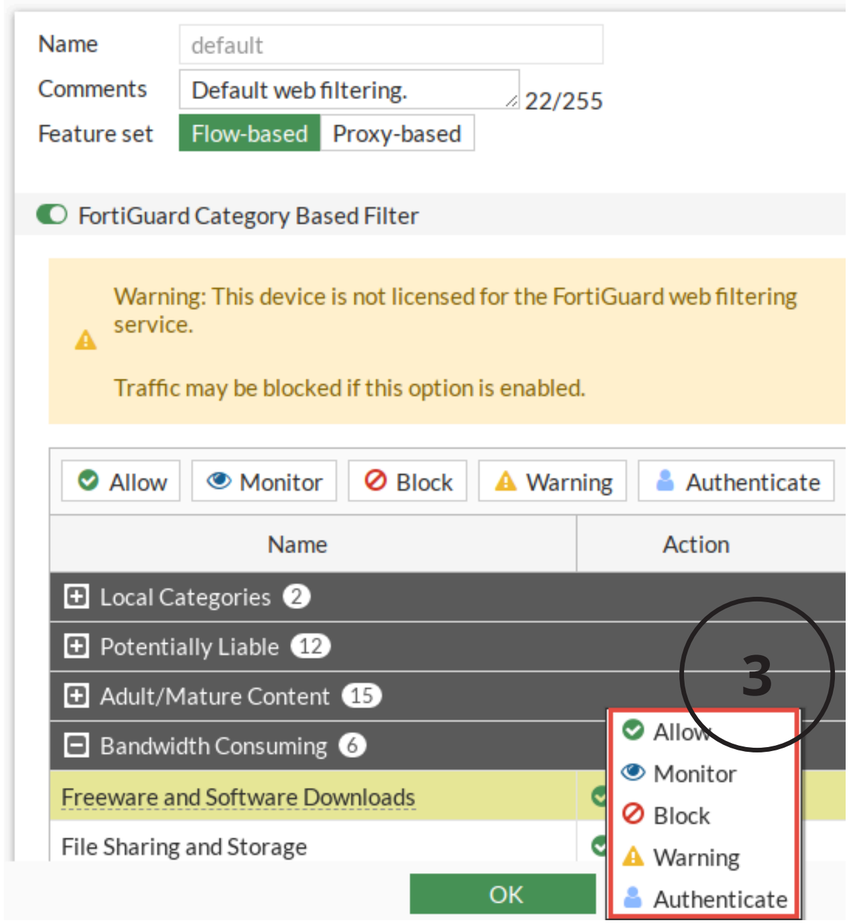
وزارة الاتصـــــالات
وتكنولوجيا المعلومات

Configuring FortiGuard Web Filtering





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وزارة الاتصـــــالات
وتكنولوجيا المعلومات

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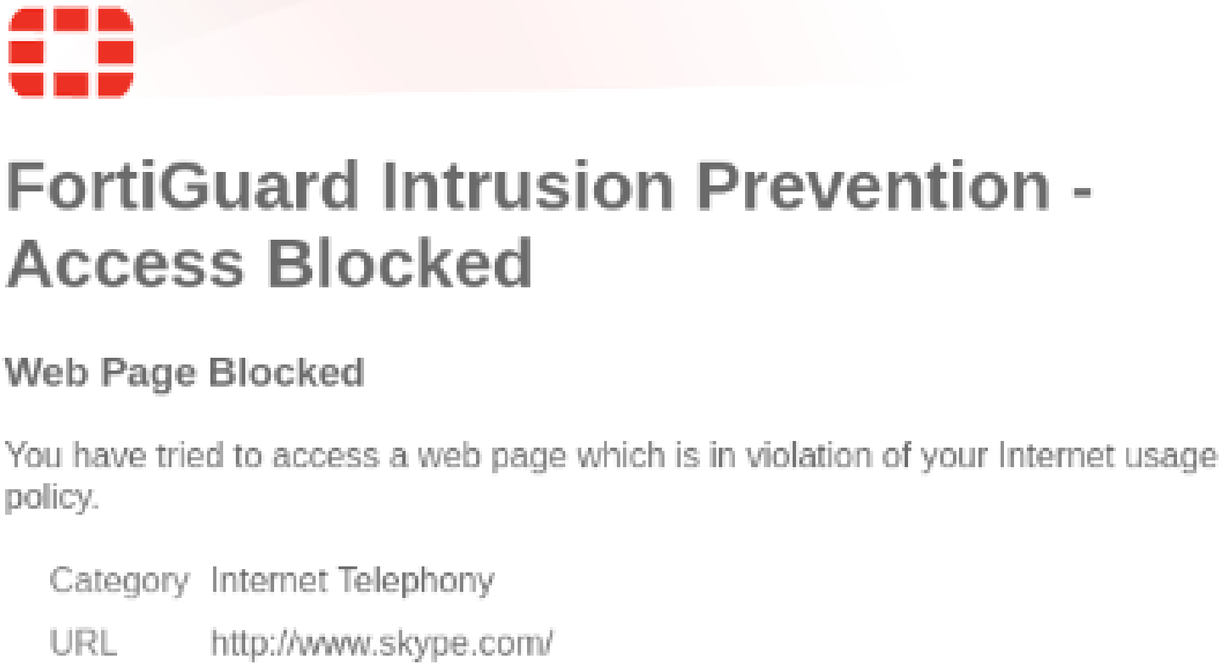

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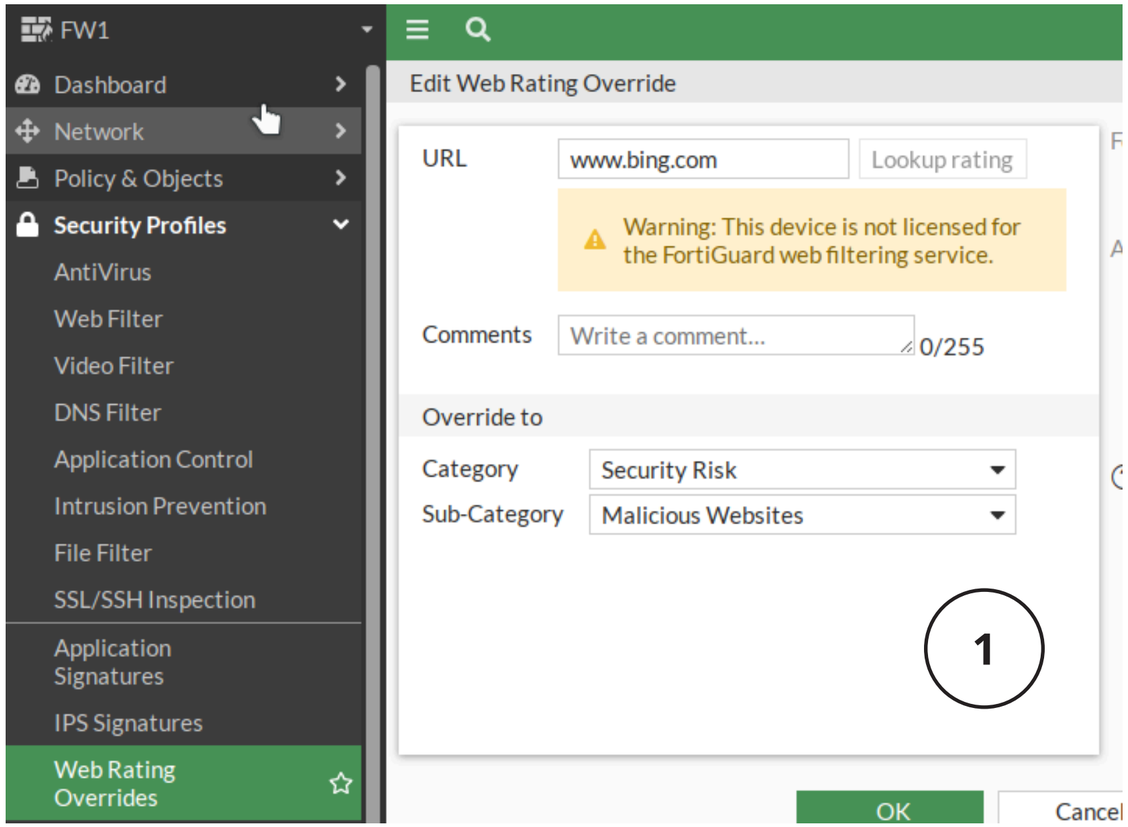
وزارة الاتصـــــالات
وتكنولوجيا المعلومات

Configuring FortiGuard Web Rating



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وتكنولوجيا المعلومات

Setting Up Web Filtering Authentication

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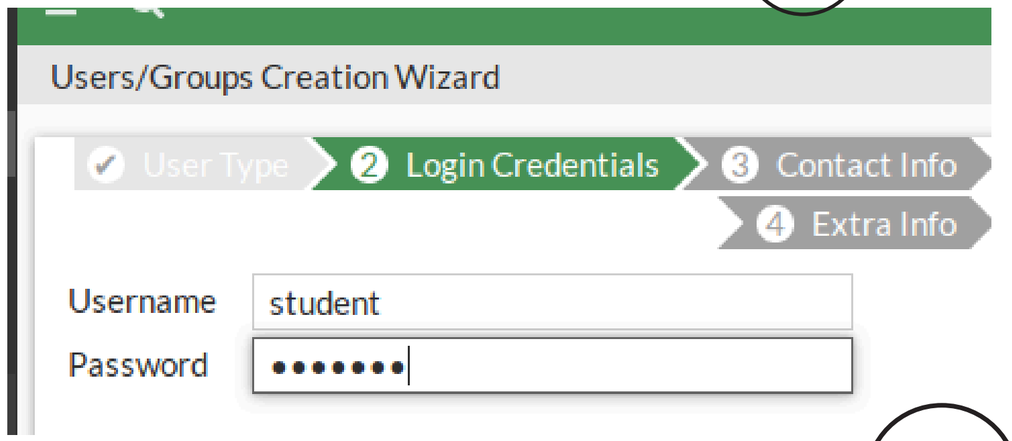
1



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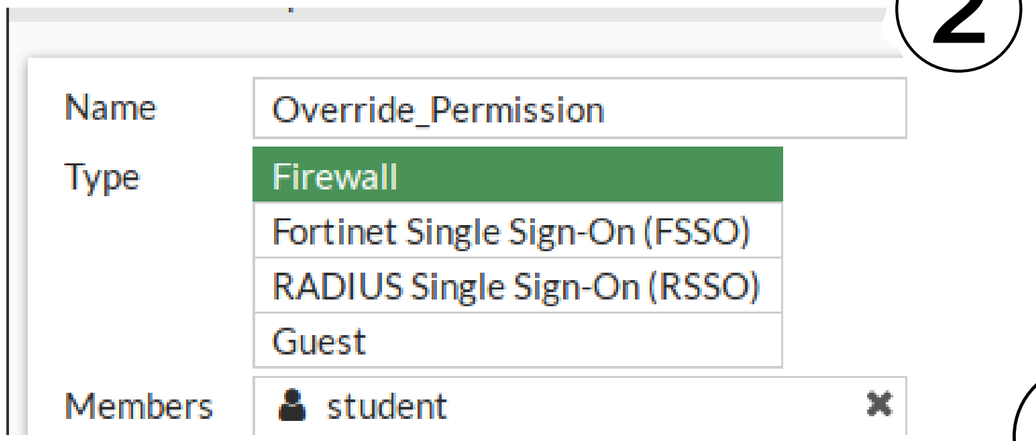

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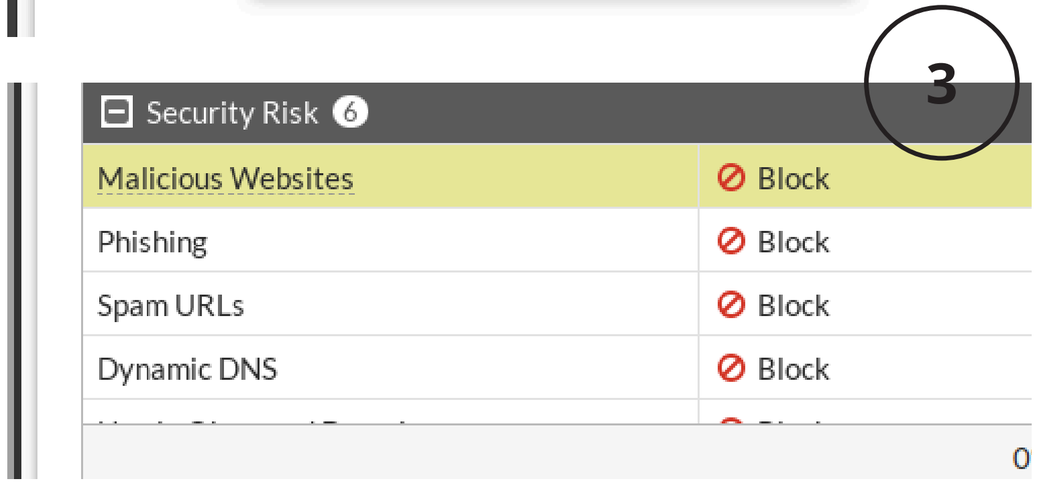

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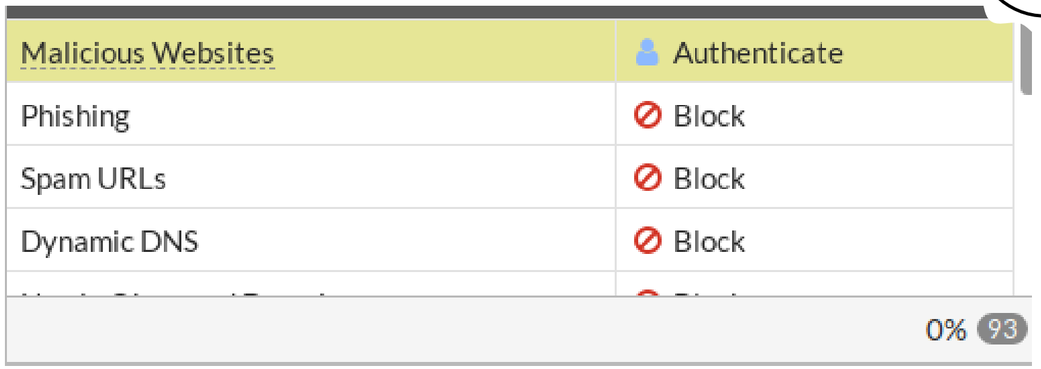

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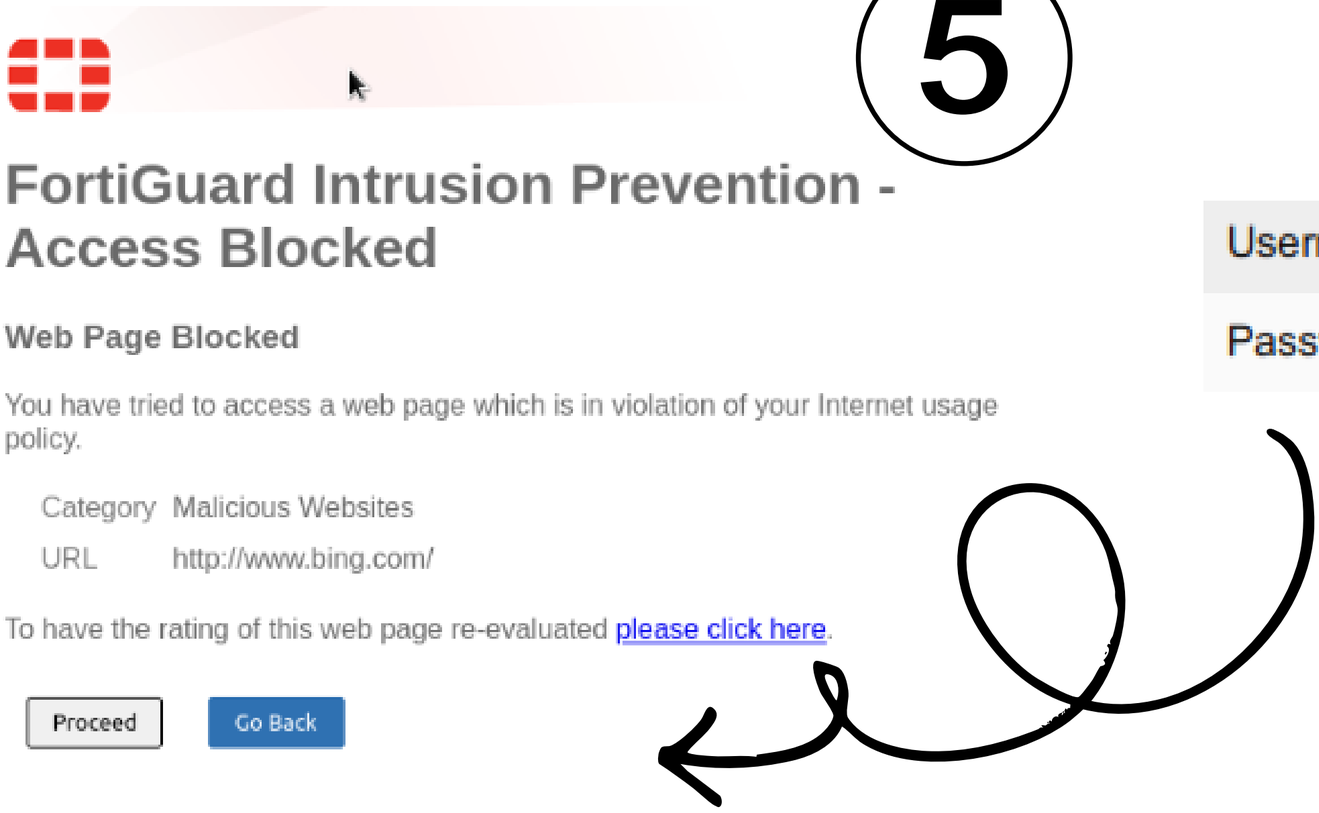
وزارة الاتصـــــالات
وتكنولوجيا المعلومات

Setting Up Web Filtering Authentication

5



Username	student
Password	fortinet

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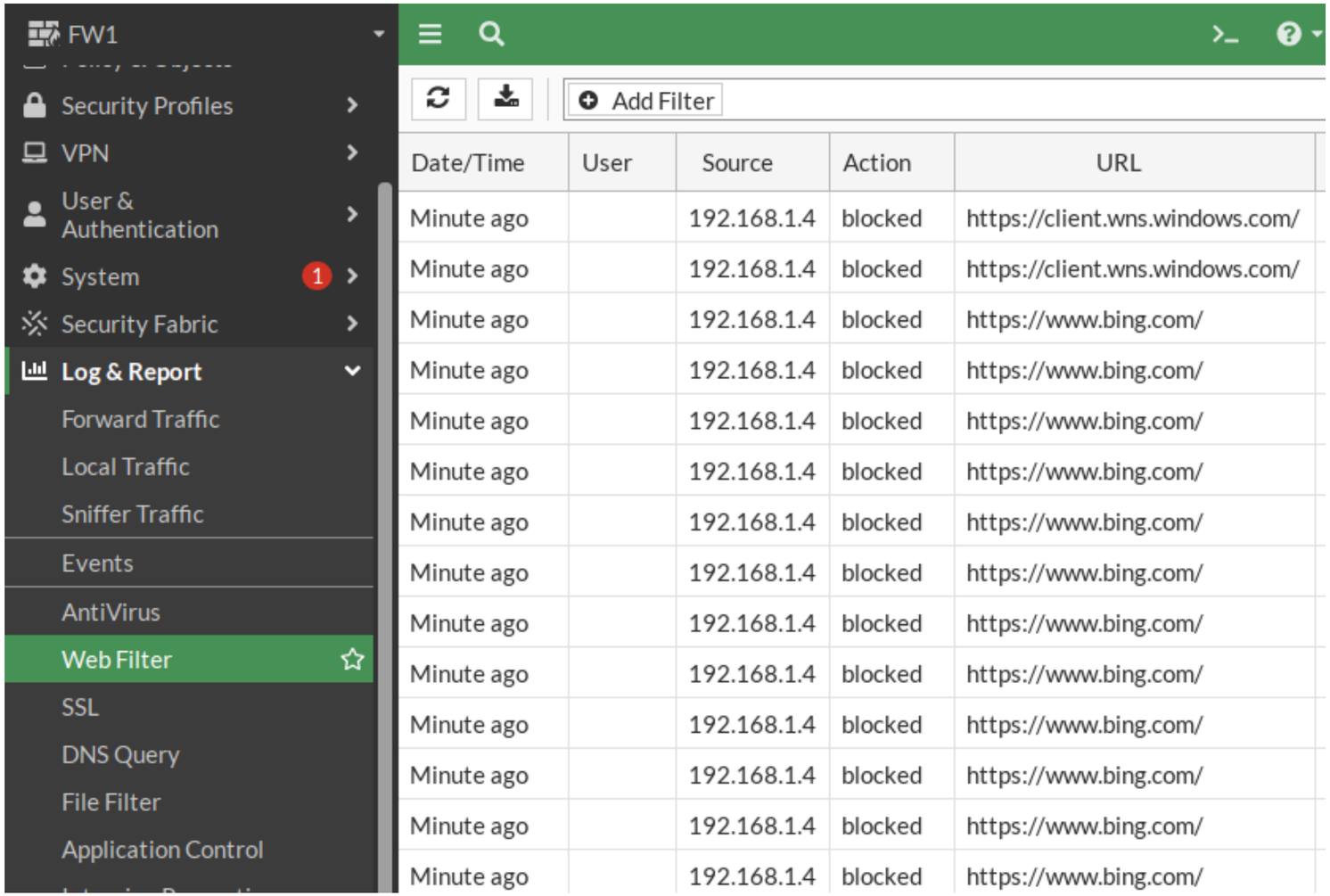
وتكنولوجيا المعلومات

Login & Monitoring



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وتكنولوجيا المعلومات

Key Types of Security Profiles

3-Application Control

- Identifies and controls applications running on the network.
- You can block or allow specific apps like: Facebook , Torrent & WhatsApp
- Helps reduce risk and bandwidth misuse.
- Application Contorl use the IPS engine to scan traffic against application pattern .

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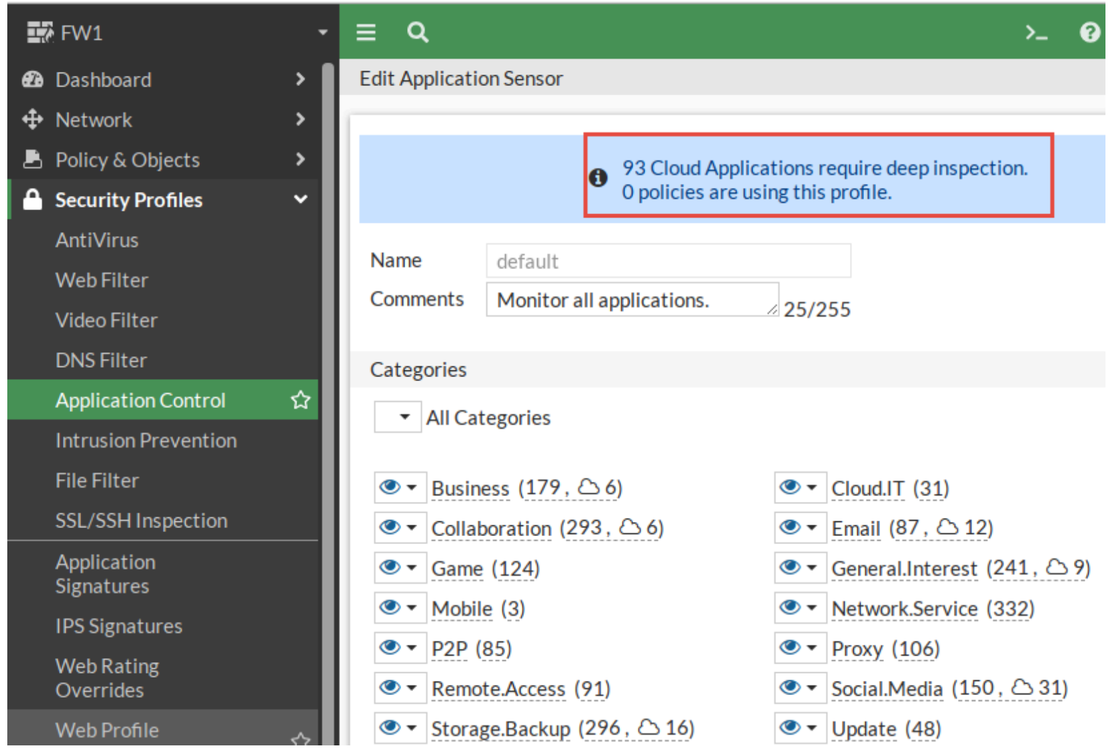
وزارة الاتصالات
وتكنولوجيا المعلومات

Controlling Application Traffic



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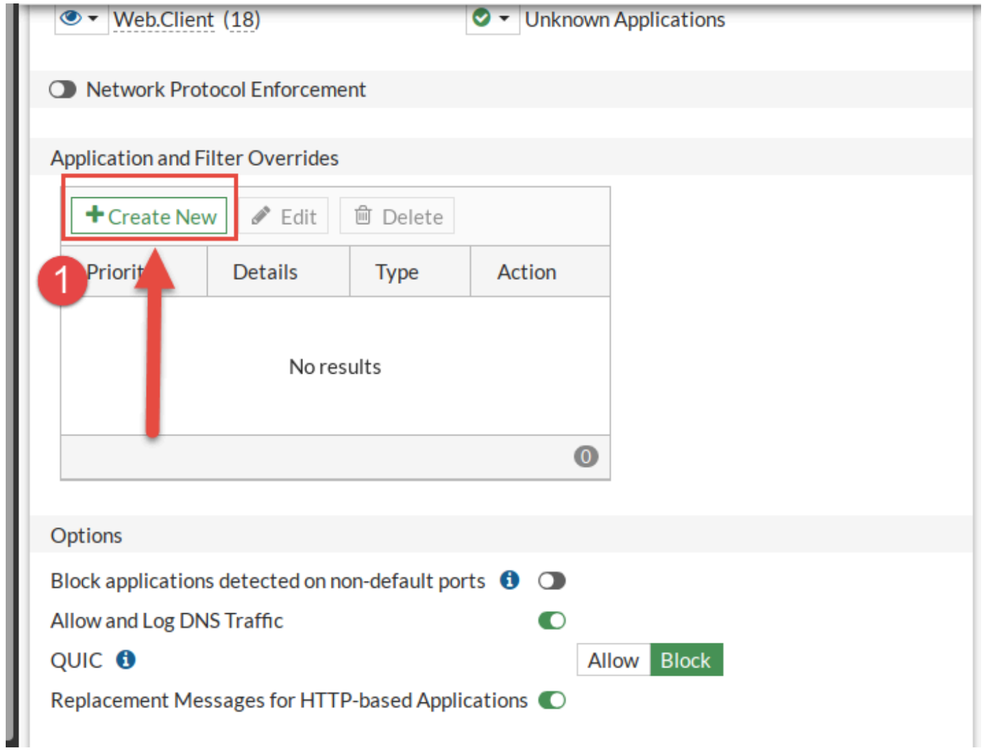

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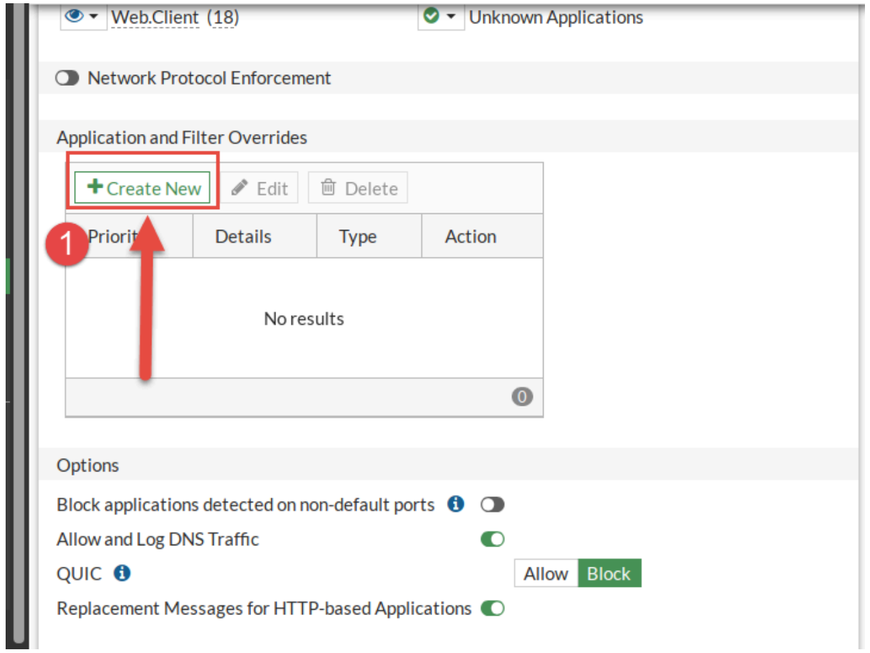
وزارة الاتصالات
وتكنولوجيا المعلومات

Controlling Application Traffic



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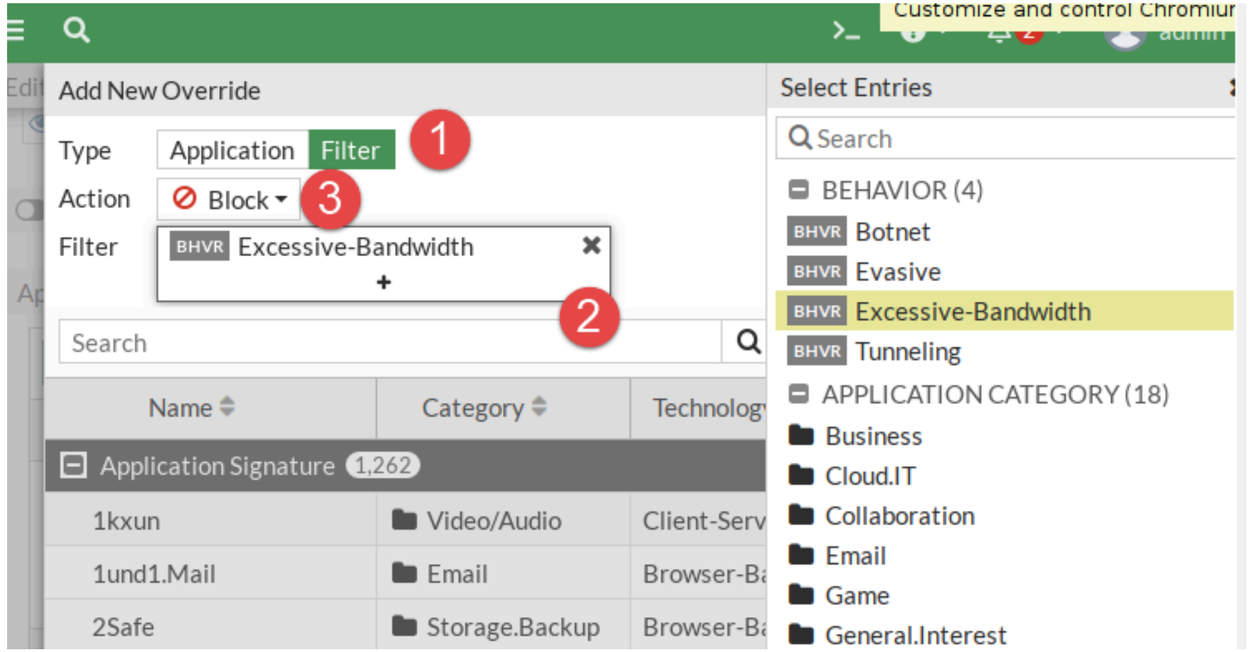

4

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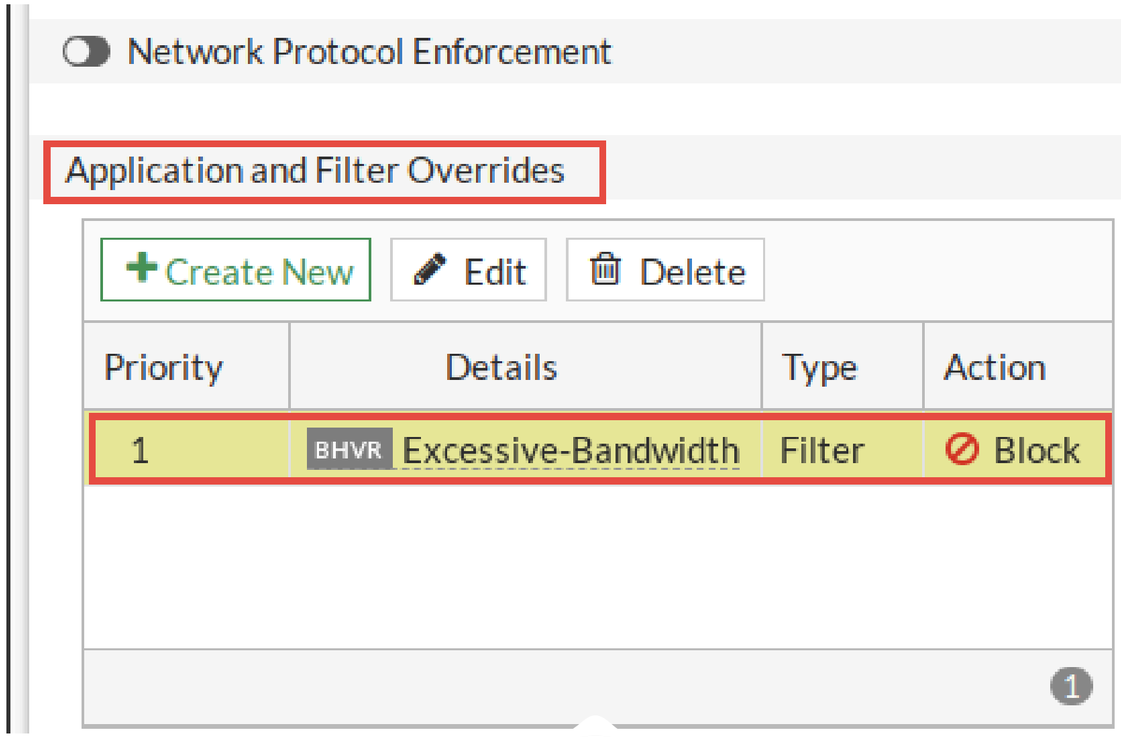
وتكنولوجيا المعلومات

Controlling Application Traffic



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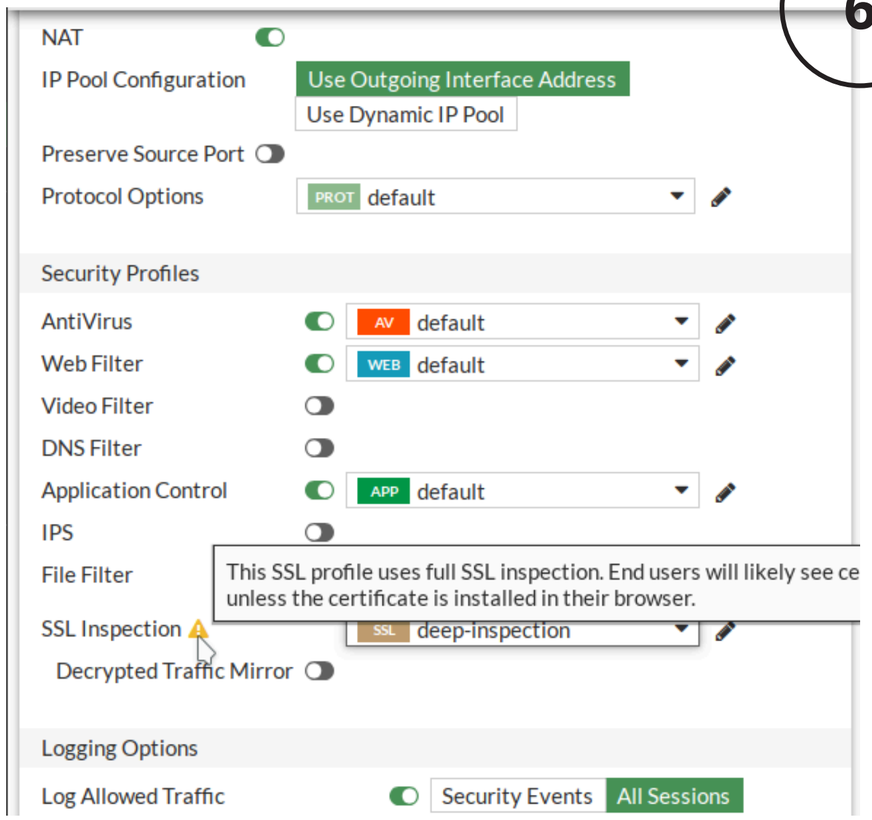

6

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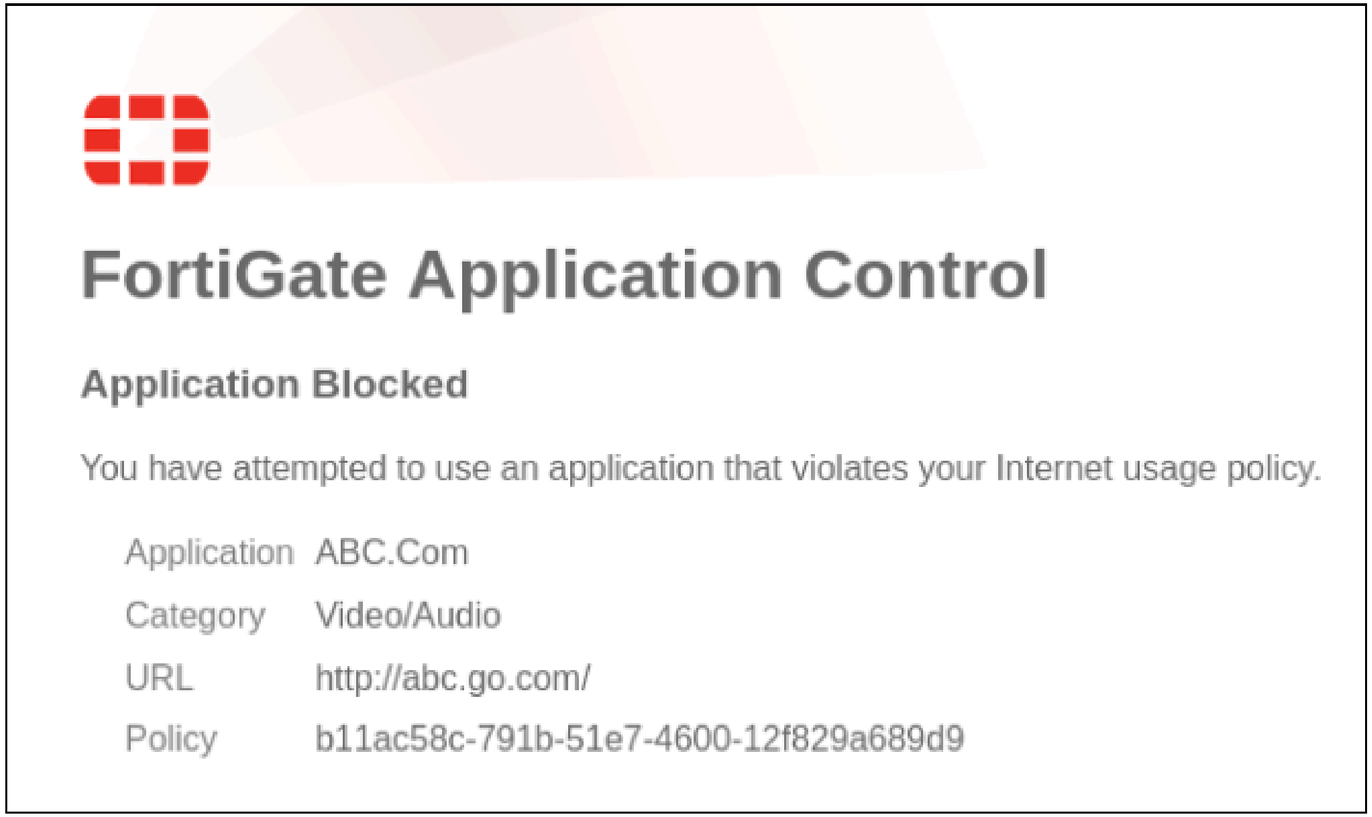
وتكنولوجيا المعلومات

Controlling Application Traffic - Testing

Open a new browser tab, and then go to the following URL: http://abc.go.com.

FortiGate should display a block message—it can take up to two minutes for the block page to appear because of the change in configuration.



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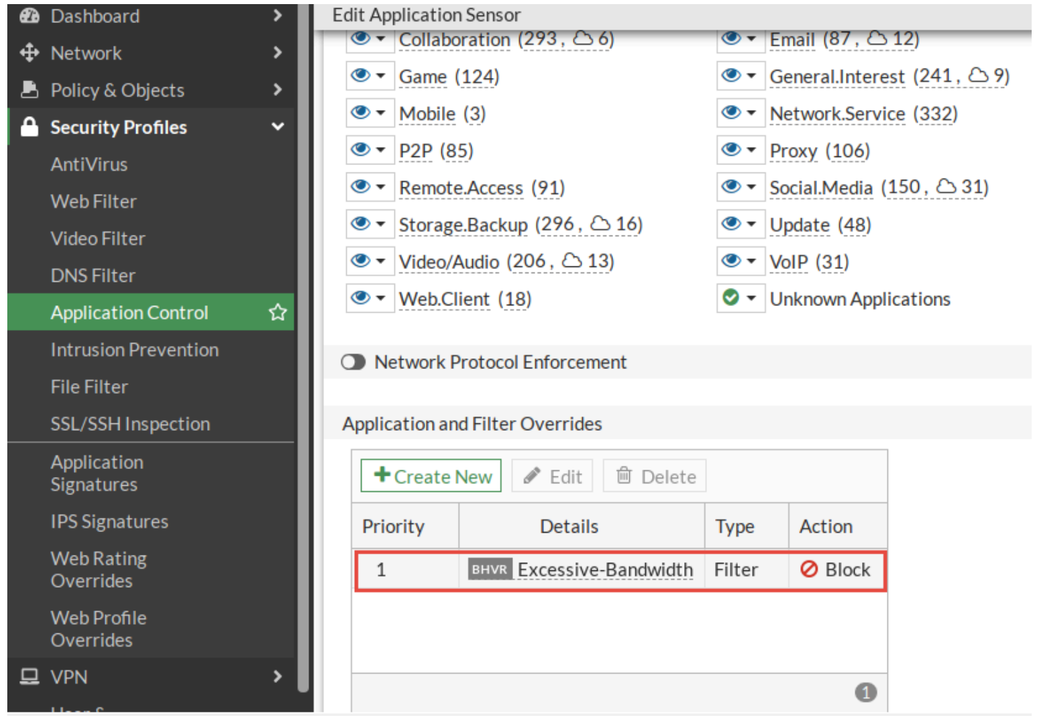
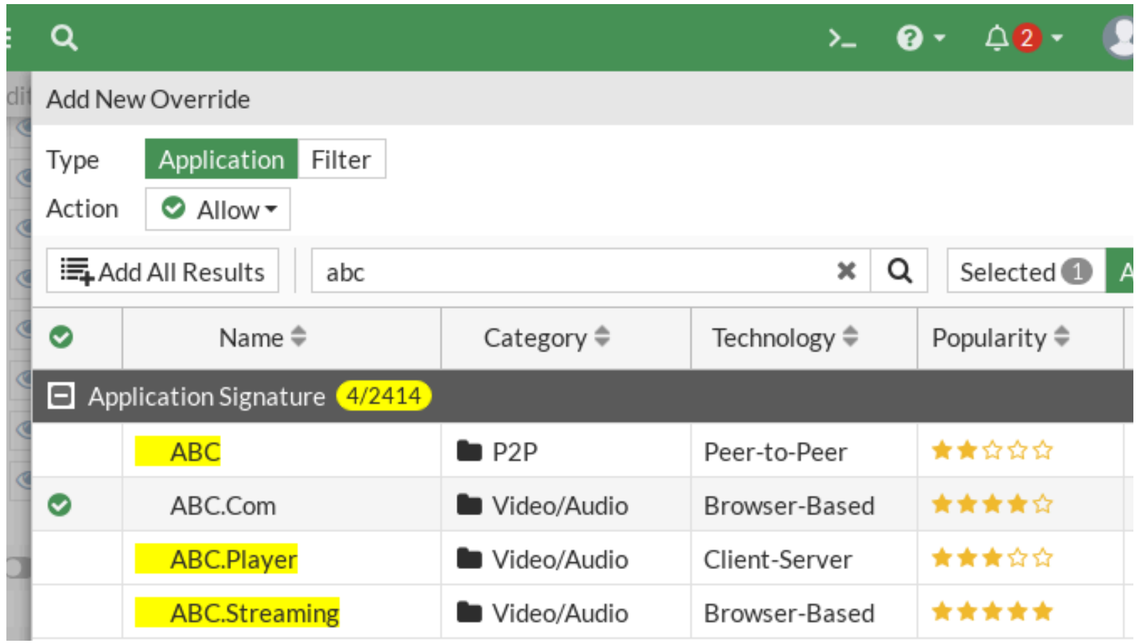
وزارة الاتصالات
وتكنولوجيا المعلومات

Configure Application Overrides

Application Overrides for the ABC.Com application signature, and set the action to Allow



1



2

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وتكنولوجيا المعلومات

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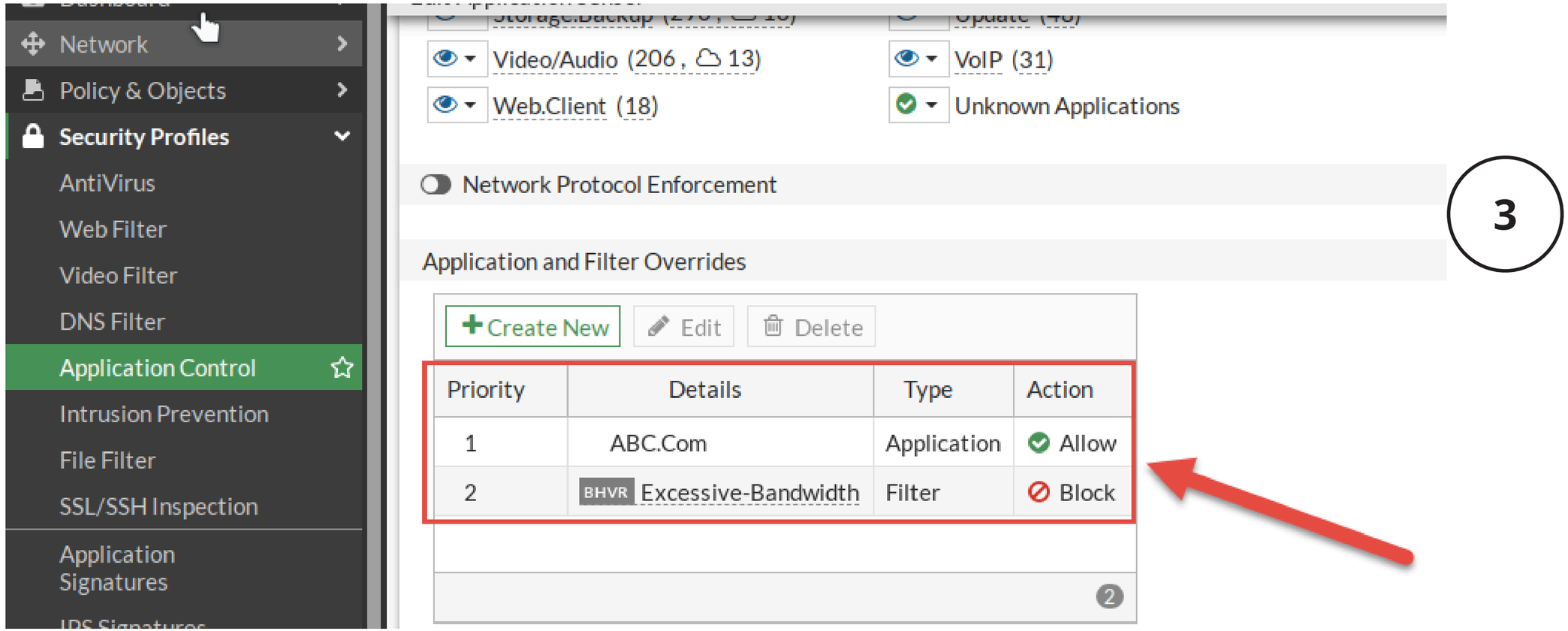
Application Overrides for the ABC.Com application signature, and set the action to Allow



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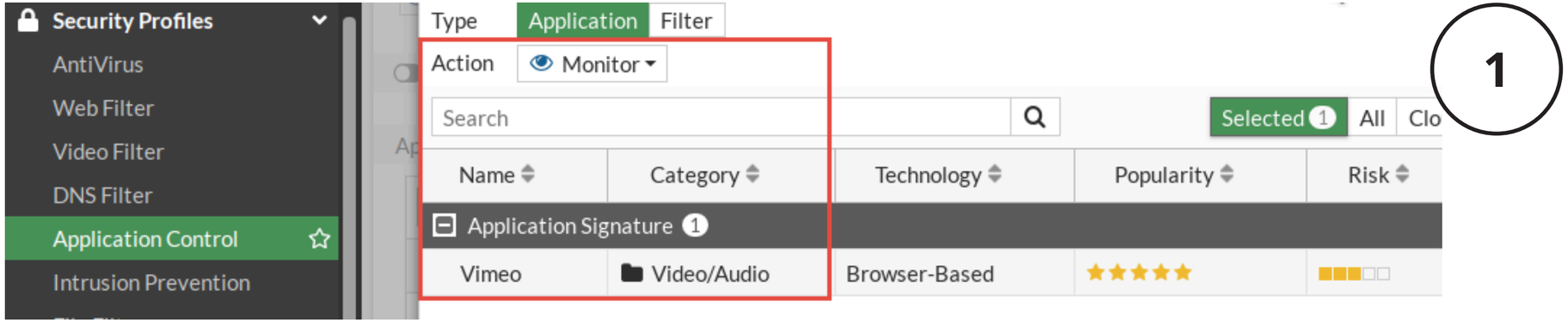
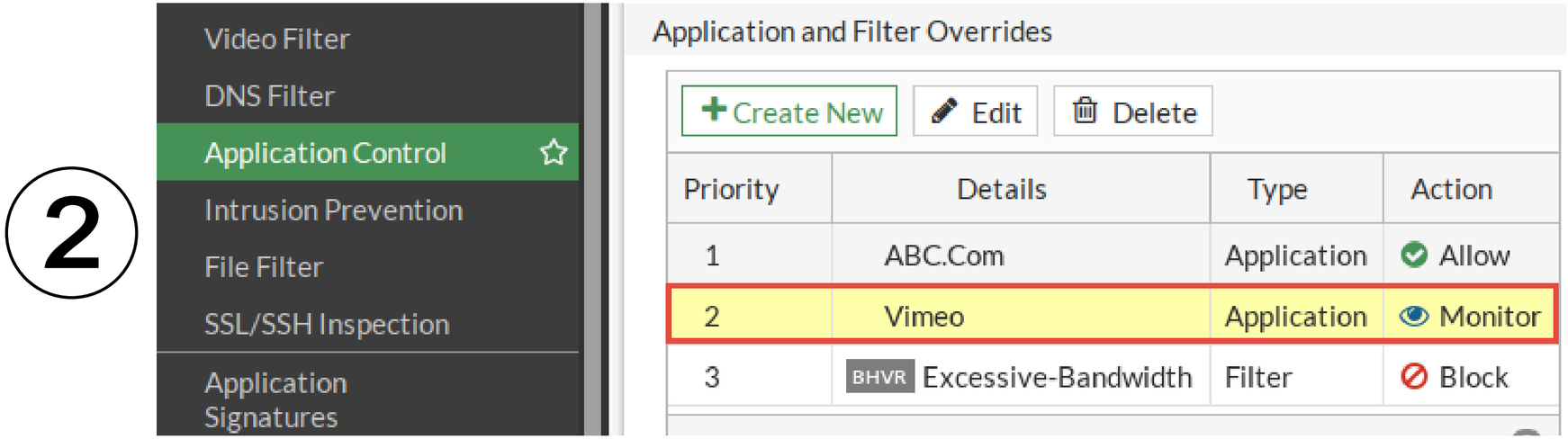
وتكنولوجيا المعلومات

Controlling Application Bandwidth Usage

Ex: Vimeo is Audio / Video Application will be use in testing





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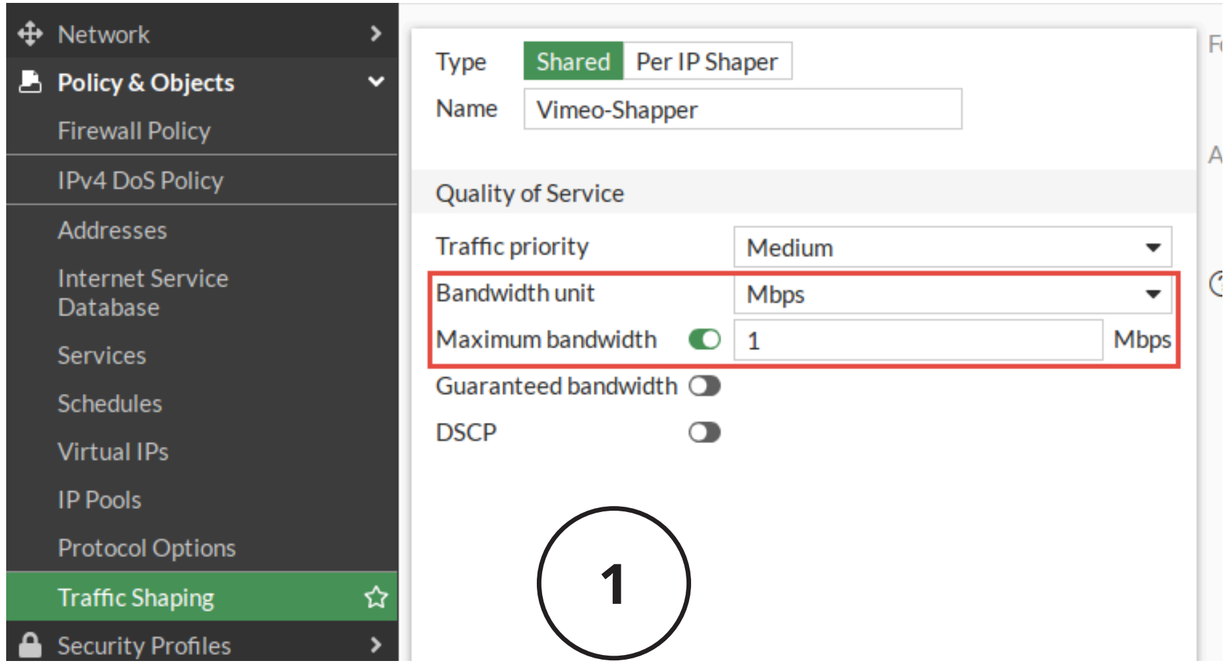
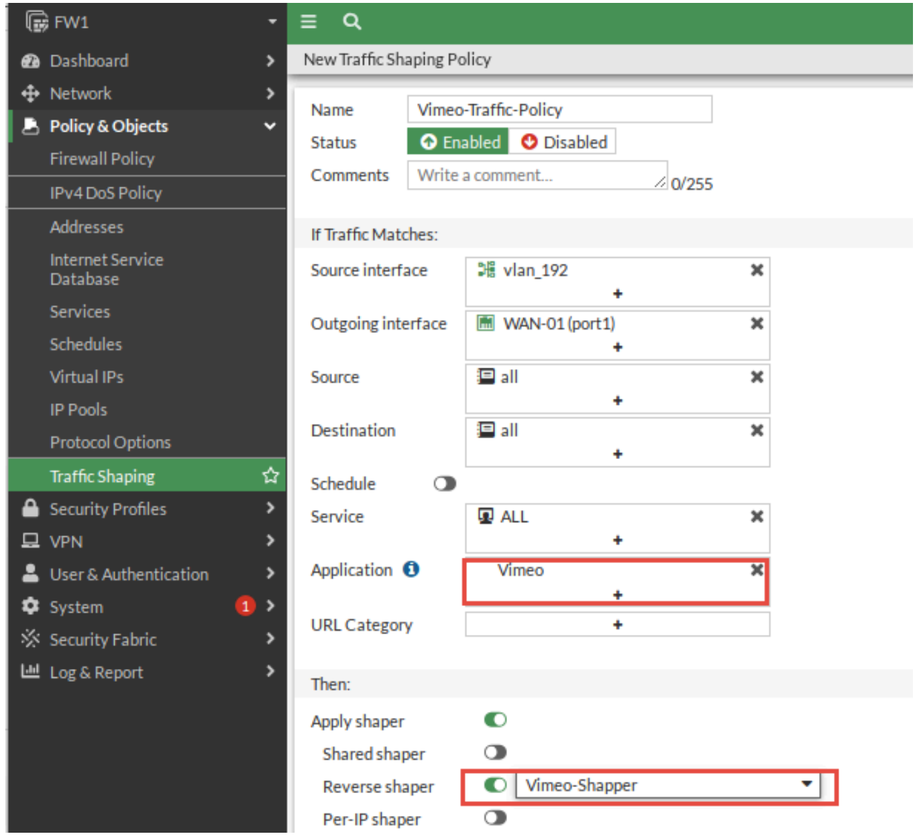
Controlling Application Bandwidth Usage

To Configure Bandwidth Usage need to Trafic Shaper

2





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وتكنولوجيا المعلومات

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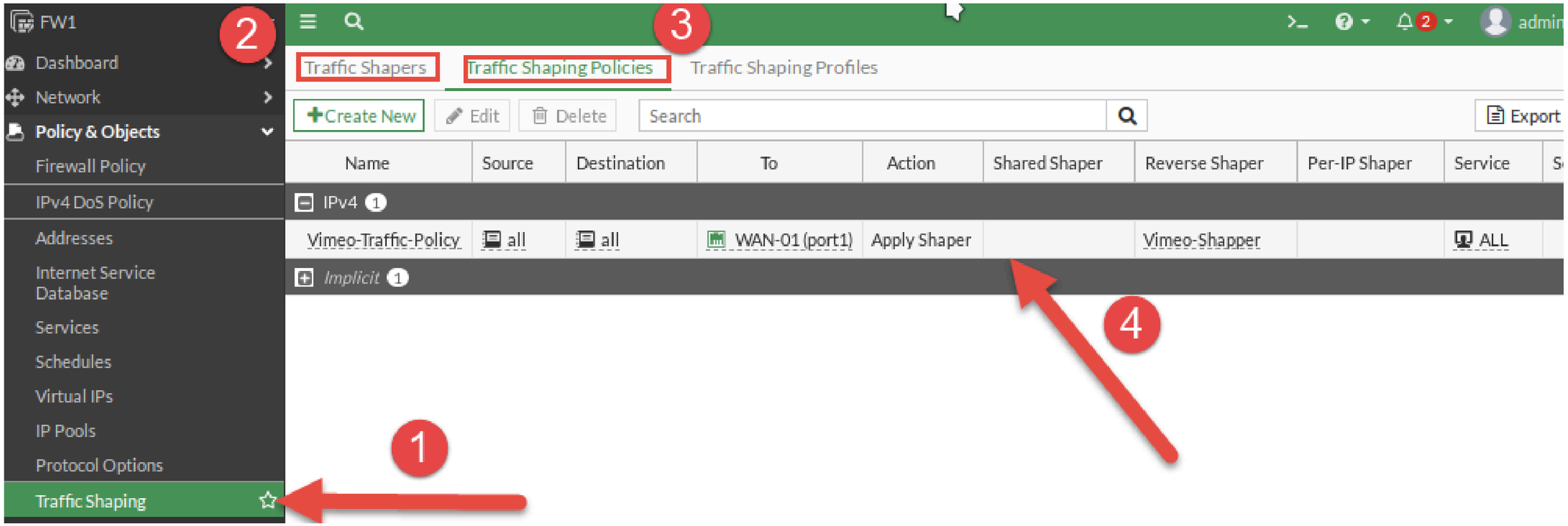

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THANK YOU

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