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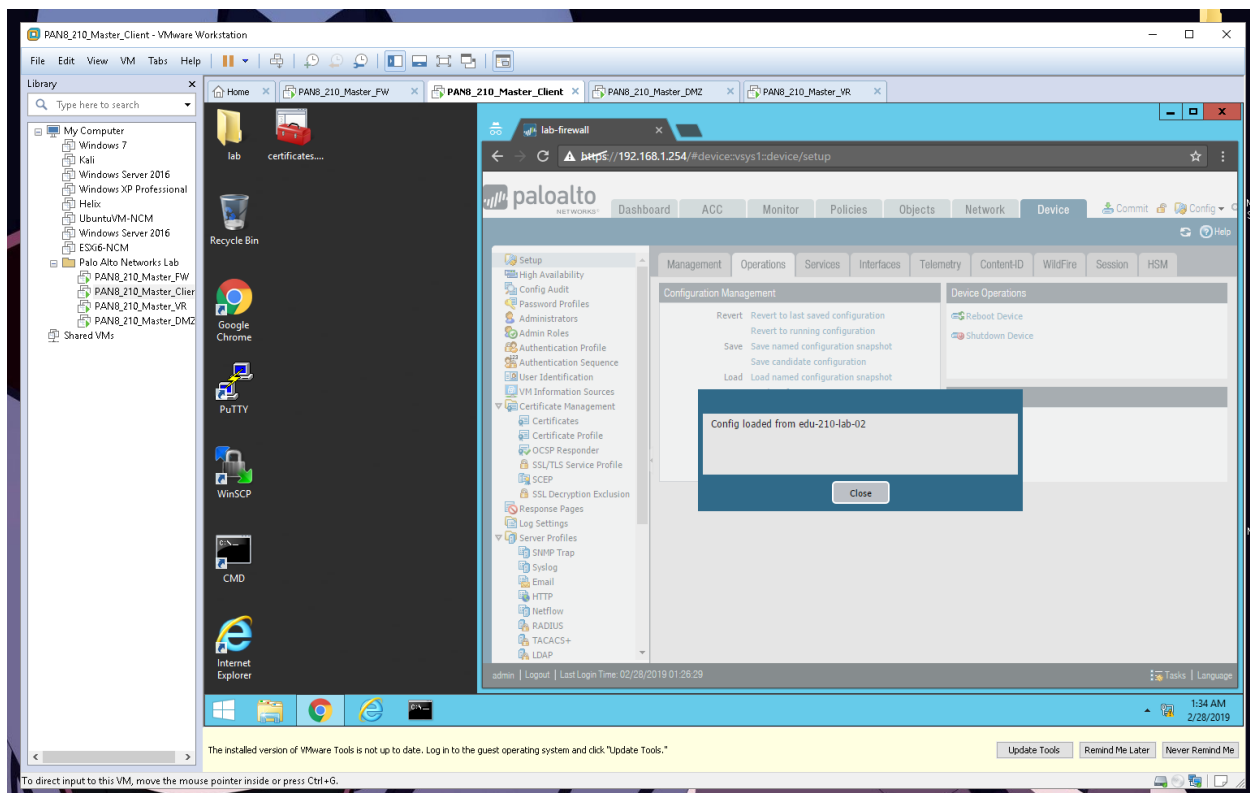
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ITEC 4345 – Cyber Systems Security

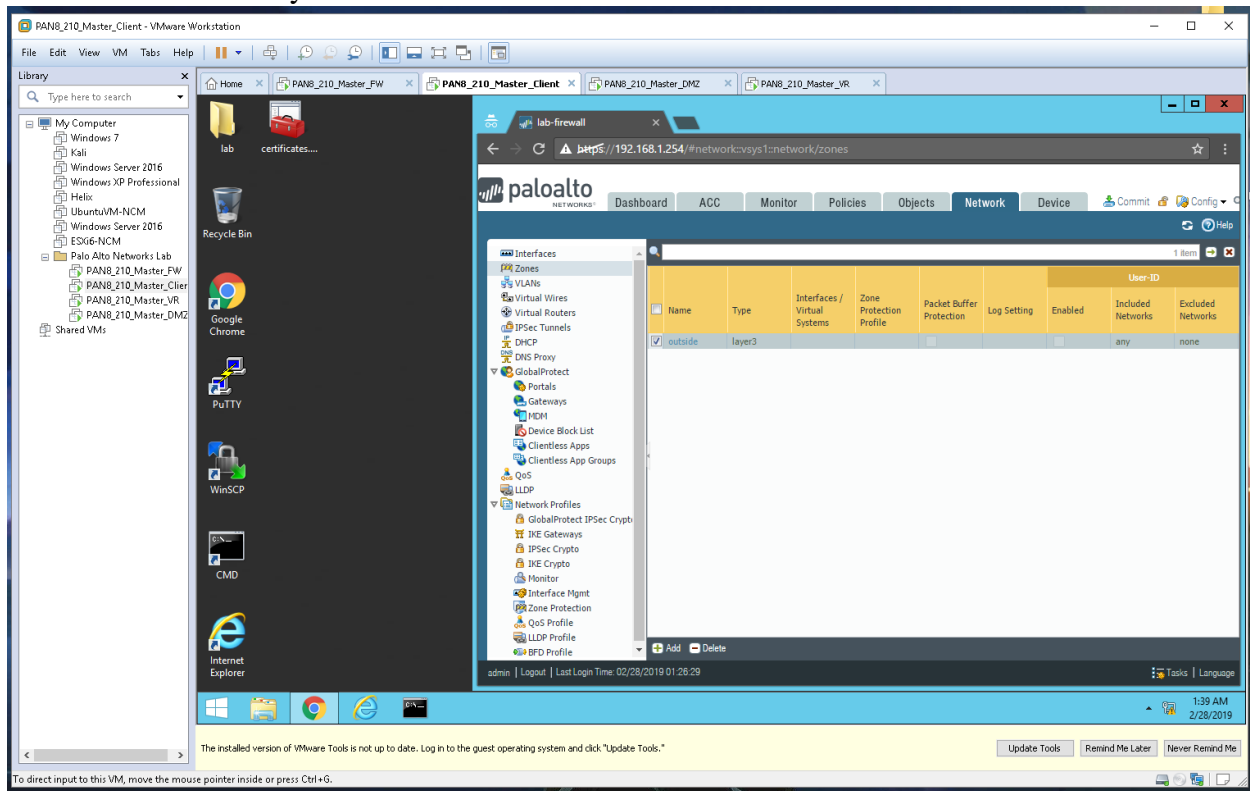
February 27, 2019

Palo Alto Networks Lab 2

## 1. Log into firewall to load config Snapshot



### 3. Create New Security Zones



The screenshot shows a VMware Workstation window titled "PAN8\_210\_Master\_Client - VMware Workstation". Inside the VM, the Palo Alto Networks management interface is open, displaying the "Zones" configuration page. The interface includes a sidebar with a tree view of configuration objects and a main table for the zones.

**Table: Zones**

Name	Type	Interfaces / Virtual Systems	Zone Protection Profile	Packet Buffer Protection	Log Setting	Enabled	Included Networks	Excluded Networks
outside	layer3						any	none

At the bottom of the window, a yellow banner displays the message: "The installed version of VMware Tools is not up to date. Log in to the guest operating system and click 'Update Tools.'".

#### 4. Create Interface Management Profiles

The screenshot shows a VMware Workstation window titled "PAN8\_210\_Master\_Client - VMware Workstation". Inside the VM, a web browser is open to the Palo Alto Networks management interface at the URL `https://192.168.1.254/#network:vsys1:network/network-profiles/interface-mgmt`. The interface has a sidebar with a tree view containing the following items:

- Interfaces
- Zones
- VLANs
- Virtual Wires
- Virtual Routers
- IPSec Tunnels
- DHCP
- DNS Proxy
- GlobalProtect
- Portals
- Gateways
- MDM
- Device Block List
- Clientless Apps
- Clientless App Groups
- QoS
- LLDP
- Network Profiles
  - GlobalProtect IPSec Crypto
  - IKE Gateways
  - IPSec Crypto
  - IKE Crypto
  - Monitor
  - Interface Mgmt
  - Zone Protection
  - QoS Profile
  - LLDP Profile

The main content area displays a table with 2 items:

	Name	Ping	Telnet	SSH	HTTP	HTTP OCSP	HTTPS	SNMP	Respo... Pages	User-ID	User-ID Syslog Listener-SSL	User-ID Syslog Listener-UDP	Permit... IP Addres...
<input type="checkbox"/>	ping-respon... pages	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Ping	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

At the bottom of the VM window, a yellow message bar states: "The installed version of VMware Tools is not up to date. Log in to the guest operating system and click 'Update Tools.'". Buttons for "Update Tools", "Remind Me Later", and "Never Remind Me" are visible.

## 5. Configure Ethernet Interfaces

The screenshot displays a VMware Workstation window titled 'PAN8\_210\_Master\_Client - VMware Workstation'. The interface shows a virtual machine named 'PAN8\_210\_Master\_Client' running. The Palo Alto Networks management console is visible, with the 'Network' tab selected. The 'Interfaces' section is expanded, showing a list of interfaces. The 'ethernet1/1' interface is highlighted, showing its configuration: Layer3, Management Profile, Link State, IP Address (Dynamic-DHCP Client), Virtual Router (none), and Tag (Untagged).

Interface	Interface Type	Management Profile	Link State	IP Address	Virtual Router	Tag
ethernet1/1	Layer3			Dynamic-DHCP Client	none	Untagged
ethernet1/2	Layer3	ping-response-paiges		192.168.1.3/24	none	Untagged
ethernet1/3	Layer3	Ping		192.168.50.1/24	none	Untagged
ethernet1/4	Virtual Wire			none	none	Untagged
ethernet1/5	Virtual Wire			none	none	Untagged
ethernet1/6				none	none	Untagged
ethernet1/7				none	none	Untagged
ethernet1/8				none	none	Untagged
ethernet1/9				none	none	Untagged

The bottom of the window shows a yellow notification bar: 'The installed version of VMware Tools is not up to date. Log in to the guest operating system and click "Update Tools."'. The status bar at the bottom indicates the time as 1:54 AM on 2/28/2019.

## 6. Create a Virtual Wire

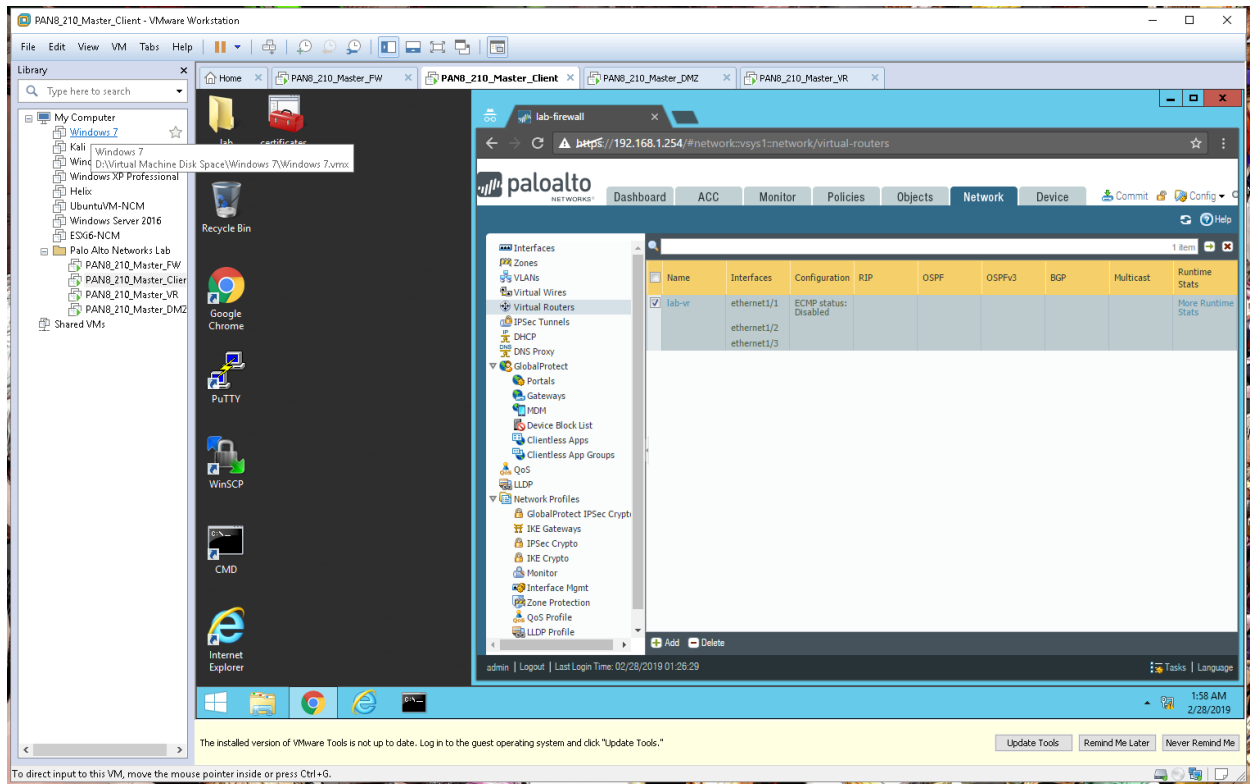
The screenshot shows a VMware Workstation window titled "PAN8\_210\_Master\_Client - VMware Workstation". The main window displays the Palo Alto Networks virtual firewall configuration. The left sidebar shows the configuration tree with "Virtual Wires" selected. The main pane shows the "Virtual Wires" tab with a table of interfaces.

Name	Interface1	Interface2	Tag Allowed	Multicast Firewalling	Link State Pass Through
<input checked="" type="checkbox"/> Danger	ethernet1/4	ethernet1/5	default	<input type="checkbox"/>	<input checked="" type="checkbox"/>

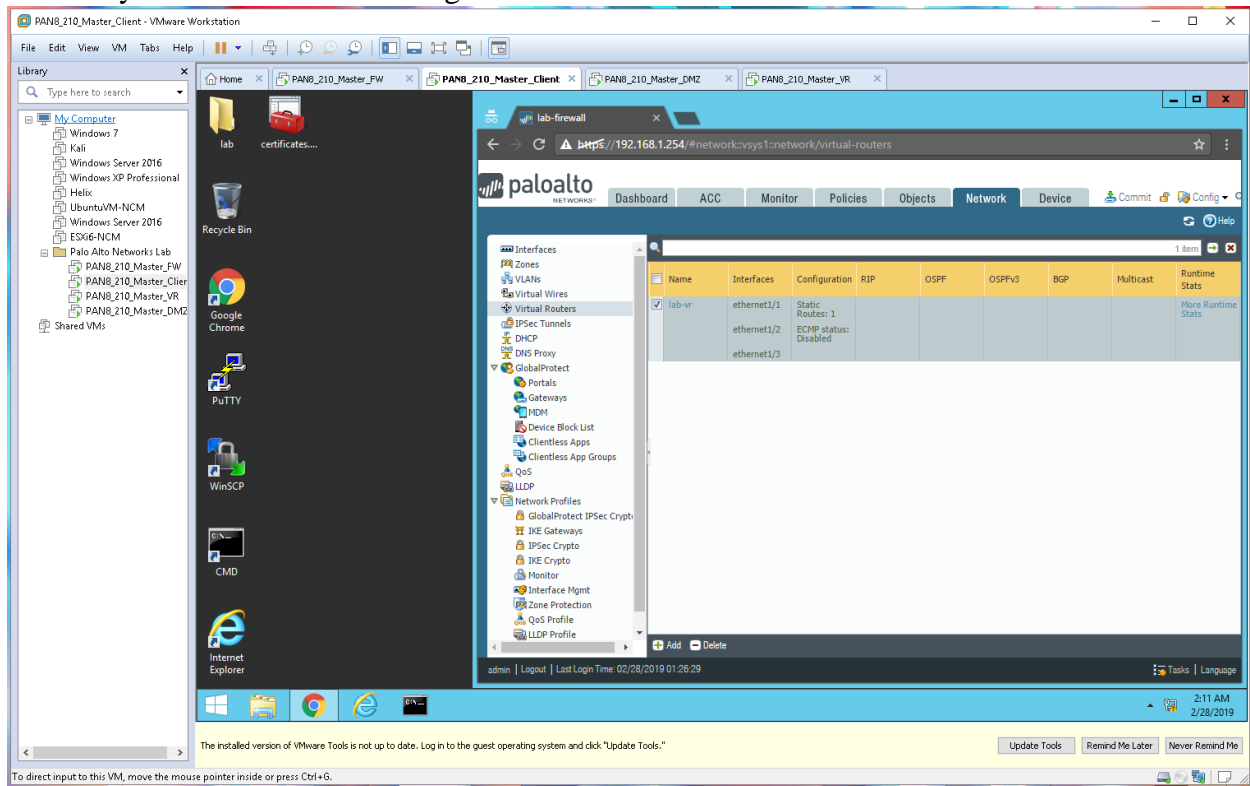
The bottom status bar indicates the installed version of VMware Tools is not up to date. Log in to the guest operating system and click "Update Tools."

To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

## 7. Create a Virtual Router



## 9. Modify Outside Interface Config



The screenshot shows a VMware Workstation window titled "PAN8\_210\_Master\_Client - VMware Workstation". The main window displays the Palo Alto Networks virtual router configuration page for "lab-vr". The left sidebar shows the configuration tree with "Interfaces" selected. The main content area shows a table of interfaces for "lab-vr".

Name	Interfaces	Configuration	RIP	OSPF	OSPFV3	BGP	Multicast	Runtime Stats
lab-vr	ethernet1/1	Static Routes: 1						More Runtime Stats
	ethernet1/2	ECMP status: Disabled						
	ethernet1/3							

The bottom status bar indicates: "The installed version of VMware Tools is not up to date. Log in to the guest operating system and click 'Update Tools.'" with buttons for "Update Tools", "Remind Me Later", and "Never Remind Me".