Cyber Range – EtherChannel Build (VLAN 5 Mgmt) – Cisco 3560 + RV340 + ESXi

Management network moved to VLAN 5 (10.10.10.0/24). All trunks now allow VLANs 5 and 10.

0) Reset Interfaces on Cisco 3560

```
enable
configure terminal
default interface range fa0/1 - 8
default interface gi0/1
end
write memory
```

1) Build EtherChannels (encapsulation FIRST)

Po1 → Cisco RV340 (fa0/1–2)

```
interface range fa0/1 - 2
 description === LACP Uplink to RV340 ===
 switchport trunk encapsulation dot1q
 switchport mode trunk
 switchport trunk allowed vlan 5,10
 channel-group 1 mode active
 no shutdown
exit

interface port-channel 1
 description === Trunk to RV340 ===
 switchport trunk encapsulation dot1q
 switchport mode trunk
 switchport trunk allowed vlan 5,10
 no shutdown
exit
```

Po2 → ESXi Host A (fa0/3–4)

```
interface range fa0/3 - 4
 description === ESXi Host A ===
 switchport trunk encapsulation dot1q
 switchport mode trunk
 switchport trunk allowed vlan 5,10
 channel-group 2 mode active
 no shutdown
exit

interface port-channel 2
 description === ESXi Host A Trunk ===
 switchport trunk encapsulation dot1q
 switchport mode trunk
 switchport trunk allowed vlan 5,10
 no shutdown
exit
```

Po3 → ESXi Host B (fa0/5–6)

```
interface range fa0/5 - 6
 description === ESXi Host B ===
 switchport trunk encapsulation dot1q
 switchport mode trunk
 switchport trunk allowed vlan 5,10
 channel-group 3 mode active
 no shutdown
exit
```

```
interface port-channel 3
 description === ESXi Host B Trunk ===
 switchport trunk encapsulation dot1q
 switchport mode trunk
 switchport trunk allowed vlan 5,10
 no shutdown
exit
```

Po4 → ESXi Host C (fa0/7–8)

```
interface range fa0/7 - 8
 description === ESXi Host C ===
 switchport trunk encapsulation dot1q
 switchport mode trunk
 switchport trunk allowed vlan 5,10
 channel-group 4 mode active
 no shutdown
exit

interface port-channel 4
 description === ESXi Host C Trunk ===
 switchport trunk encapsulation dot1q
 switchport mode trunk
 switchport trunk allowed vlan 5,10
 no shutdown
exit
```

Gi0/1 → Trunk to West Switch

```
interface gi0/1
 description === Trunk to West Switch ===
 switchport trunk encapsulation dot1q
 switchport mode trunk
 switchport trunk allowed vlan 1,5,10
 no shutdown
exit
end
write memory
```

2) RV340 & ESXi Side (Notes)

```
RV340 GUI:
- LAN → LAG: Add LAN2 + LAN3 to LAG1, mode LACP Active.
- VLAN Membership: Tag VLANs 5 and 10 on LAG1.
- IPv4 Setup:
  - VLAN 10 IP: 172.20.10.254/24, Default Route: 10.10.10.1 (pfSense)
  - VLAN 5 IP (if used on RV340): 10.10.10.254/24 (optional)
- DHCP: Relay on VLAN10 → 172.20.10.101; DNS = 172.20.10.100 (DC).
- Firewall: Allow VLAN10 → {172.20.10.100-.102} (AD services), VLAN10 → 10.10.10.1.

ESXi:
- Teaming: Route based on IP hash. Both vmnics Active. Enable LACP (active).
- Port Groups: Management = VLAN 5; VM Network = VLAN 10.
```

3) Verification

```
show etherchannel summary
show interfaces trunk
show lacp neighbor
```

4) Troubleshooting (useful during build)

```
! Silence console logging spam
conf t
no logging console
end
```

```
! Temporarily stop flapping on fa0/3-4
conf t
interface range fa0/3 - 4
 shutdown
! after fixing:
 no shutdown
end

! Reset bundle if needed
conf t
default interface range fa0/3 - 4
no interface port-channel 2
end
```