

# How to Configure Inter-VLAN Routing With a Router

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# Table of contents

Equipment

Legacy Inter-VLAN Routing

Router-on-a-stick Inter-VLAN Routing

# Equipment

Cisco 1841/1941 Router

Cisco Catalyst 2960 Switch (layer 2)

- Ensure that an IP addressing scheme is created before proceeding

# Legacy Inter-VLAN Routing

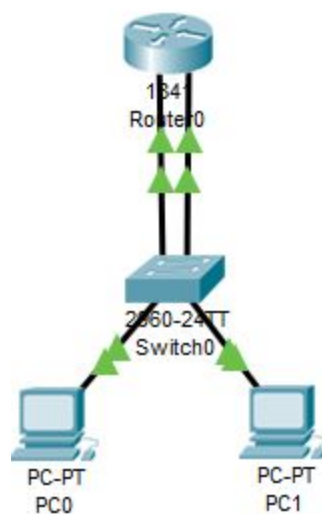
## 1841/1941 Router

- 1) En
- 2) Config t
- 3) Int f0/0
- 4) Ip add x.x.x.x y.y.y.y (ip address and subnet mask for 1 VLAN)
- 5) No shut
- 6) Int f0/1
- 7) Ip add x.x.x.x y.y.y.y (ip address and subnet mask for another vlan)
- 8) No shut

## 2960 switch

- 1) Int vlan x
- 2) Ip add x.x.x.x y.y.y.y
- 3) Int f0/x (ports connected to the router - repeat as necessary)
- 4) Switchport mode access
- 5) Switchport access vlan x (vlans created in steps 4 and 8 of router configuration)
- 6) Int f0/y (ports connected to PCs)
- 7) Switchport mode access
- 8) Switchport access vlan x (vlans created in step 4 and 8 of router configuration)

- On the PCs connected to the switch, assign a static IP address, subnet mask and ensure the default gateway is pointed to the IP address of the router interfaces in step 4



and 8 of router configuration

# Router-On-A-Stick

## 1841/1941 Router

- 1) En
- 2) Config t
- 3) Int f0/0.x
- 4) Encapsulation dot 1q x (vlan number)
- 5) Ip add x.x.x.x y.y.y.y
  - Repeat steps 3 - 5 for however many vlans required
- 6) int f0/0.x (this interface will be the native VLAN)
- 7) encapsulation dot 1q native x (vlan number)
- 8) ip add x.x.x.x y.y.y.y

## 2960 Switch

- 1) En
- 2) Config t
- 3) Int f0/x (ports connected to a PC)
- 4) Switchport mode access
- 5) Switchport access vlan x (vlan created in step 4 for 1841/1941 router)
- 6) Repeat steps 1-4 for non-native vlans
- 7) Int f0/x
- 8) Switchport mode trunk
- 9) Switchport trunk native vlan x (vlan created in step 7 for 1841/1941 router)

