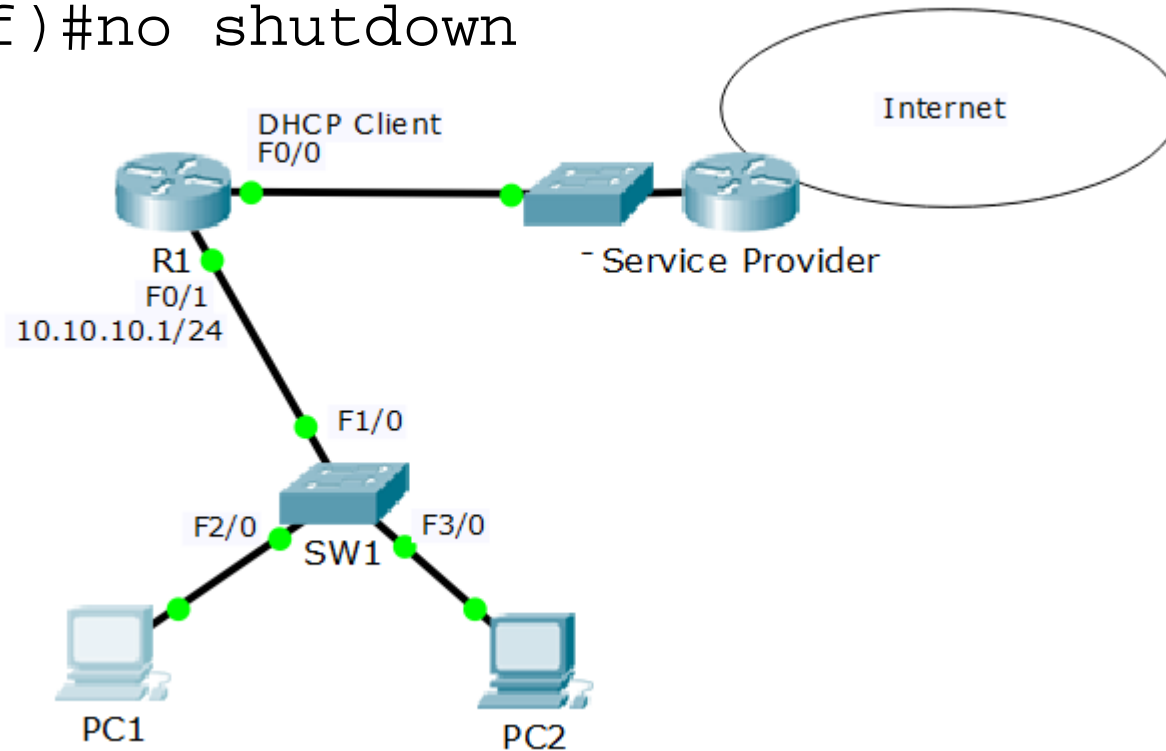# Configuring a Cisco Router as a DHCP Client

- Cisco routers are typically manually configured with static IP addresses

- An exception to this is where an office is connected to the Internet but has not bought static public IP addresses (because it does not contain any publicly available servers which would need a fixed IP address for incoming connections)

- The office still requires a public IP address to allow internal hosts outbound connectivity to the Internet through NAT

- In this case the router will receive the public IP address on its outside interface from the Internet service provider via DHCP

Configuring a Cisco Router as a DHCP Client

```
R1(config)#interface f0/0
R1(config-if)#ip address dhcp
R1(config-if)#no shutdown
```


DHCP Client
F0/0

Internet

Service Provider

R1
F0/1
10.10.10.1/24

F1/0

F2/0   F3/0
       SW1

PC1   PC2

FLACKBOX
www.flackbox.com

Verification – show dhcp lease

```
R1#show dhcp lease
Temp IP addr: 203.0.113.2 for peer on Interface: FastEthernet0/0
Temp sub net mask: 255.255.255.0
DHCP Lease server: 203.0.113.1 , state: Bound
DHCP Transaction id: 64B8EE07
Lease: 86400 secs, Renewal: 43200 secs, Rebind: 75600 secs
Temp default-gateway addr: 203.0.113.1
Next timer fires after: 11:53:13
Retry count: 0 Client-ID:cisco-0001.63C2.9701-Fa0/0
Client-ID hex dump: 636973636F2D303030312E363343322E
93730312D4661302F30
Hostname: R1
```