ACTIVITY 15: System Configuration Dialog
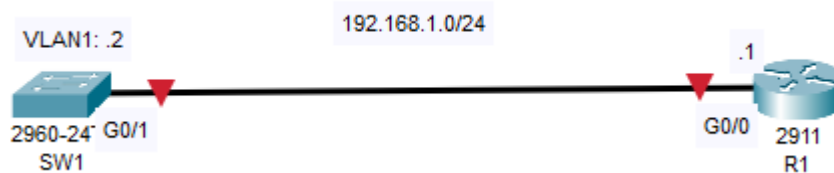

1. Use the System Configuraton Dialog to configure R1 and SW1 according to the following, and save the configurations to NVRAM: (Don't use basic management setup)

R1:
Hostname: R1
Enable secret: Cisco
Enable password: CCNA
Virtual terminal password: CCENT
SNMP network management: No
Confiture VLAN1 interface: No
GigabitEthernet0/0: 192.168.1.1 255.255.255.0

```
Router#setup


        --- System Configuration Dialog ---

Would you like to enter the initial configuration dialog? [yes/no]: yes


 Would you like to enter basic management setup? [yes/no]: no
 First, would you like to see the current interface summary? [yes]:yes

 Current interface summary

 Interface              IP-Address     OK? Method Status                  Protocol

 GigabitEthernet0/0     unassigned     YES manual administratively down down

 GigabitEthernet0/1     unassigned     YES manual administratively down down

 GigabitEthernet0/2     unassigned     YES manual administratively down down

 Vlan1                  unassigned     YES manual administratively down down

 Configuring global parameters:

   Enter host name [Router]: R1


   Enter enable secret: Cisco

   The enable password is used when you do not specify an
   enable secret password, with some older software versions, and
   some boot images.
   Enter enable password: CCNA

   The virtual terminal password is used to protect
   access to the router over a network interface.
   Enter virtual terminal password: CCENT
Configure SNMP Network Management? [no]:No
Configuring interface parameters:

Do you want to configure Vlan1  interface? [no]:No
Do you want to configure GigabitEthernet0/0  interface? [no]:yes
    IP address for this interface: 192.168.1.1
    Subnet mask for this interface [255.255.255.0] :
Do you want to configure GigabitEthernet0/1  interface? [no]:no
```

```
[0] Go to the IOS command prompt without saving this config.
[1] Return back to the setup without saving this config.
[2] Save this configuration to nvram and exit.

Enter your selection [2]: 2
Building configuration...
[OK]
```

SW1:
Hostname: SW1,
Enable secret: Cisco, Enable password: CCNA,
Virtual terminal password: CCENT,
SNMP network management: No,
VLAN1 interface: 192.168.1.2 255.255.255.0
Cluster command switch: No

```
Switch#setup


        --- System Configuration Dialog ---

Would you like to enter the initial configuration dialog? [yes/no]: yes


Would you like to enter basic management setup? [yes/no]: no
First, would you like to see the current interface summary? [yes]:yes

Current interface summary

Interface              IP-Address      OK? Method Status                Protocol

FastEthernet0/1        unassigned      YES manual down                  down

FastEthernet0/2        unassigned      YES manual down                  down

   Enter host name [Switch]: SW1

   The enable secret is a password used to protect access to
   privileged EXEC and configuration modes. This password, after
   entered, becomes encrypted in the configuration.
   Enter enable secret: Cisco

   The enable password is used when you do not specify an
   enable secret password, with some older software versions, and
   some boot images.
   Enter enable password: CCNA

   The virtual terminal password is used to protect
   access to the router over a network interface.
   Enter virtual terminal password: CCENT
Configure SNMP Network Management? [no]:
Configuring interface parameters:

Do you want to configure Vlan1  interface? [no]:yes
    IP address for this interface: 192.168.1.2
    Subnet mask for this interface [255.255.255.0] :
Do you want to configure FastEthernet0/1  interface? [no]:

Do you want to configure GigabitEthernet0/2  interface? [no]:
Would you like to enable as a cluster command switch? [yes/no]:no


[0] Go to the IOS command prompt without saving this config.
[1] Return back to the setup without saving this config.
[2] Save this configuration to nvram and exit.

Enter your selection [2]:
Building configuration...
[OK]
```
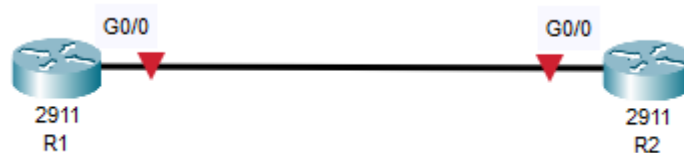
2. Ping from SW1 to R1 to test the configuration

```
SW1#ping 192.168.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
.!!!!
Success rate is 80 percent (4/5), round-trip min/avg/max = 0/0/0 ms
```

ACTIVITY 16: Loopback Interface Configuration

1. Set the IP addresses of the physical interfaces connecting the two routers as follows, and enable the interfaces: R1: 192.168.1.1/24 and R2: 192.168.1.2/24
R1(config)#interface g0/0
R1(config-if)#ip address 192.168.1.1 255.255.255.0
R1(config-if)#no shutdown

R2(config)#interface g0/0
R2(config-if)#ip address 192.168.1.2 255.255.255.0
R2(config-if)#no shutdown

2. Create a loopback interface on each router: R1: 1.1.1.1/32
R2: 2.2.2.2/32

```
R1(config)#interface loopback 0

R1(config-if)#
%LINK-5-CHANGED: Interface Loopback0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Loopback0, changed state to up

R1(config-if)#ip address 1.1.1.1 255.255.255.255
```

```
R2(config)#interface loopback 0

R2(config-if)#
%LINK-5-CHANGED: Interface Loopback0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Loopback0, changed state to up

R2(config-if)#ip address 2.2.2.2 255.255.255.255
```

3. From each router, attempt to ping both the local loopback interface and the loopback interface of the remote router.

```
R1#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

      1.0.0.0/32 is subnetted, 1 subnets
C        1.1.1.1/32 is directly connected, Loopback0
      2.0.0.0/32 is subnetted, 1 subnets
S        2.2.2.2/32 [1/0] via 192.168.1.2
      192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
C        192.168.1.0/24 is directly connected, GigabitEthernet0/0
L        192.168.1.1/32 is directly connected, GigabitEthernet0/0
```

We can see there were a previous static routing setup. So, we can ping both of the loopback addresses.

```
R1#ping 1.1.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 1.1.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/7/10 ms

R1#ping 2.2.2.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 2.2.2.2, timeout is 2 seconds:
.!!!!
Success rate is 80 percent (4/5), round-trip min/avg/max = 0/0/0 ms
R2#ping 2.2.2.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 2.2.2.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/3/10 ms

R2#ping 1.1.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 1.1.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/0 ms
```

4. Remove the loopback interface of each router.

R1(config)#no interface loopback 0

R2(config)#no interface loopback 0