

# 34 Network Device Management

## – Answer Key

You will configure Syslog and SNMP (Simple Network Management Protocol) logging in this lab exercise. The NMS server is acting as an external Syslog destination.

### SNMP and Syslog

- 1) Configure SNMP communities on R1. Use **Flackbox1** as the Read Only community string, and **Flackbox2** as the Read Write community string.

```
R1(config)#snmp-server community Flackbox1 ro
R1(config)#snmp-server community Flackbox2 rw
```

- 2) Configure R1 so it will show events from all severity levels to the external Syslog server at 10.0.0.100.

```
R1(config)#logging 10.0.0.100
R1(config)#logging trap debugging
```

- 3) Verify you have set the correct severity level.

```
R1#show logging
Syslog logging: enabled (0 messages dropped, 0 messages rate-limited,
0 flushes, 0 overruns, xml disabled, filtering disabled)
```

No Active Message Discriminator.

No Inactive Message Discriminator.

```
Console logging: level debugging, 3 messages logged, xml disabled,
filtering disabled
Monitor logging: level debugging, 3 messages logged, xml disabled,
filtering disabled
Buffer logging: disabled, xml disabled,
filtering disabled
```

```
Logging Exception size (4096 bytes)
Count and timestamp logging messages: disabled
Persistent logging: disabled
```

No active filter modules.

```
ESM: 0 messages dropped
Trap logging: level debugging, 3 message lines logged
Logging to 10.0.0.100 (udp port 514, audit disabled,
authentication disabled, encryption disabled, link up),
```

2 message lines logged,  
0 message lines rate-limited,  
0 message lines dropped-by-MD,  
xml disabled, sequence number disabled  
filtering disabled

4) Enable then disable the FastEthernet 0/1 interface on R1.

```
R1(config)#int f0/1
R1(config-if)#no shutdown
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state
to up
```

```
R1(config-if)#shutdown
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state
to administratively down
```

5) On the Syslog server at 10.0.0.100, click 'Services' then 'SYSLOG' and check you can see events for the interface coming up then back down.

