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

2. Configure R1 to send 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 that the correct severity level has been set

```
R1#show logging ?
<cr>
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, 14 messages logged, xml
disabled,
                  filtering disabled
  Monitor logging: level debugging, 14 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, 14 message lines logged  
Logging to 10.0.0.100 (udp port 514, audit disabled,  
                    authentication disabled, encryption disabled, link up),  
                    12 message lines logged,  
                    0 message lines rate-limited,  
                    0 message lines dropped-by-MD,  
                    xml disabled, sequence number disabled  
                    filtering disabled  
R1#
```

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

```
R1(config)#interface FastEthernet 0/1  
R1(config-if)#no shutdown  
R1(config-if)#  
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up  
R1(config-if)#shutdown  
R1(config-if)#  
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to  
administratively down  
R1(config-if)#end
```

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

PhysicalConfigServicesDesktopProgrammingAttributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

Syslog

Syslog

Service

OnOff

	Time	HostName	Message
1	-	10.0.0.1	%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to ...
2	-	10.0.0.1	%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up