AUTO
POWER CYCLING A MODEM
WITH MIKROTIK

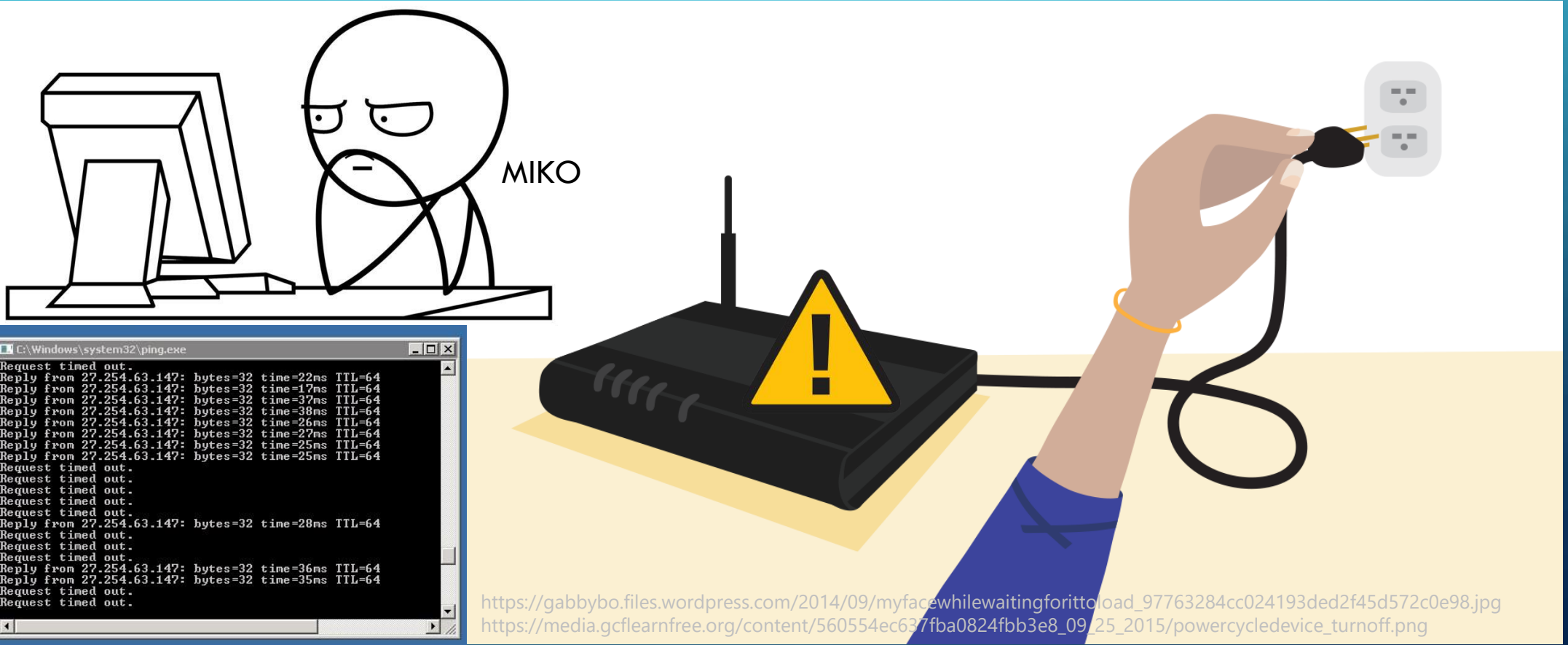UN-ATTENDED MODEM REBOOT USING A MIKROTIK POE-OUT PORT

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PROBLEM

⚠️ FAULTY DSL MODEM

MIKO

```
C:\Windows\system32\ping.exe
Request timed out.
Reply from 27.254.63.147: bytes=32 time=22ms TTL=64
Reply from 27.254.63.147: bytes=32 time=17ms TTL=64
Reply from 27.254.63.147: bytes=32 time=37ms TTL=64
Reply from 27.254.63.147: bytes=32 time=38ms TTL=64
Reply from 27.254.63.147: bytes=32 time=26ms TTL=64
Reply from 27.254.63.147: bytes=32 time=27ms TTL=64
Reply from 27.254.63.147: bytes=32 time=25ms TTL=64
Reply from 27.254.63.147: bytes=32 time=25ms TTL=64
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Reply from 27.254.63.147: bytes=32 time=28ms TTL=64
Request timed out.
Request timed out.
Request timed out.
Reply from 27.254.63.147: bytes=32 time=36ms TTL=64
Reply from 27.254.63.147: bytes=32 time=35ms TTL=64
Request timed out.
Request timed out.
```

https://gabbybo.files.wordpress.com/2014/09/myfacewhilewaitingforittoload_97763284cc024193ded2f45d572c0e98.jpg
https://media.gcflearnfree.org/content/560554ec637fba0824fbb3e8_09_25_2015/powercycledevice_turnoff.png

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THE TEAM

SERVICES
WIRELESS DATA NETWORK
DATA & TRAFFIC MANAGEMENT
WEBDEV & HOSTING
CCTV & VOIP
TRAINING & SEMINARS
DATA CENTER SERVICES

KONNECT*ing*
THE FUTURE

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BUTUAN CITY

REGIONAL CENTER
CARAGA REGION-13

Mindanao

Philippine Sea
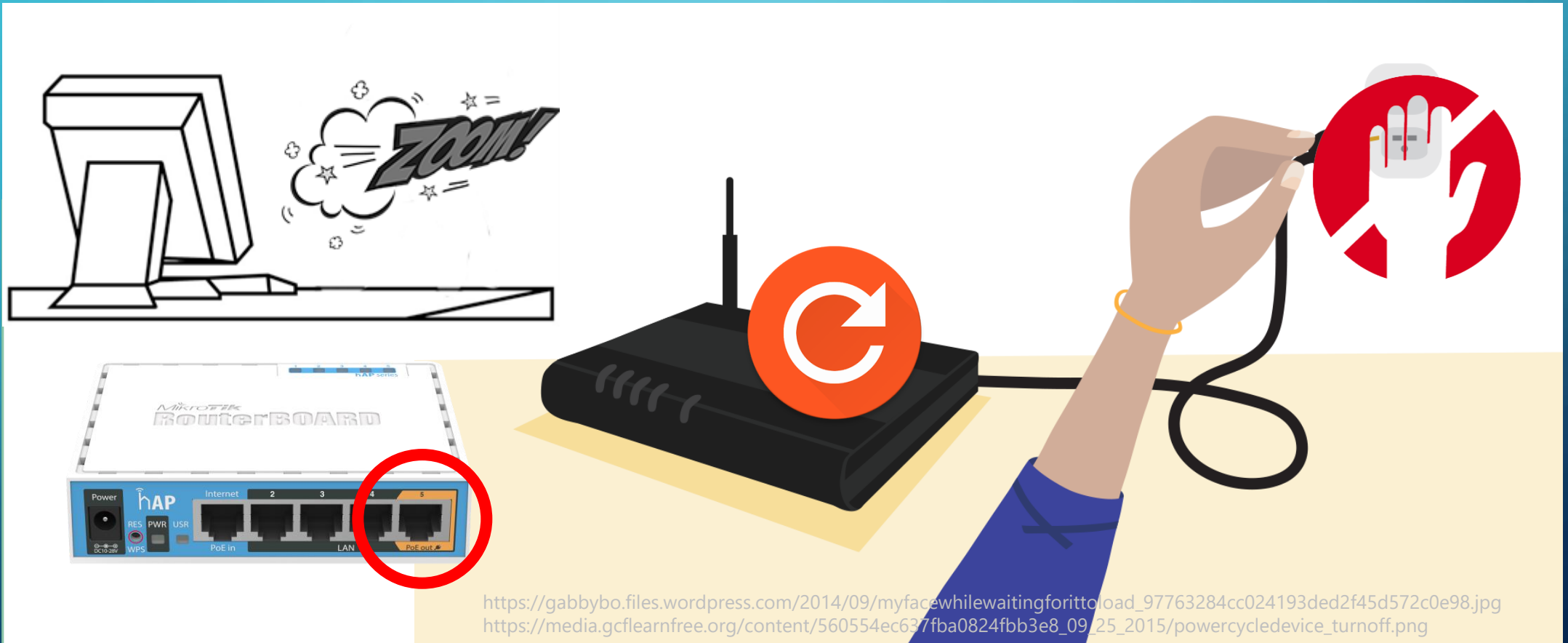
BUTUAN CITY

TRYCICLE-TAXI's

http://www.zhequia.com/2016/11/8600-beautiful-butuan.html

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PROBLEM

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https://media.gcflearnfree.org/content/560554ec637fba0824fbb3e8_09_25_2015/powercycledevice_turnoff.png

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DEVICES & MATERIALS

hAP AC Lite

DSL Modem
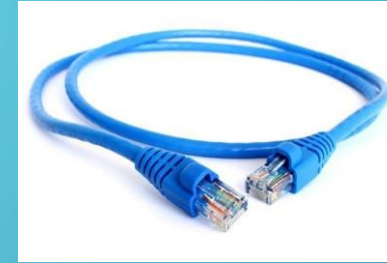
Patch Cables
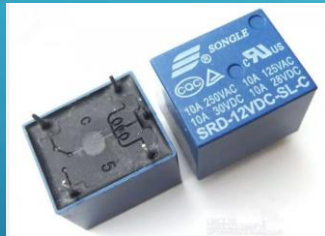
Relay 12v

RJ45 IO Port

AC Male Plug

AC Female Outlet

Surface Box

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DIAGRAM
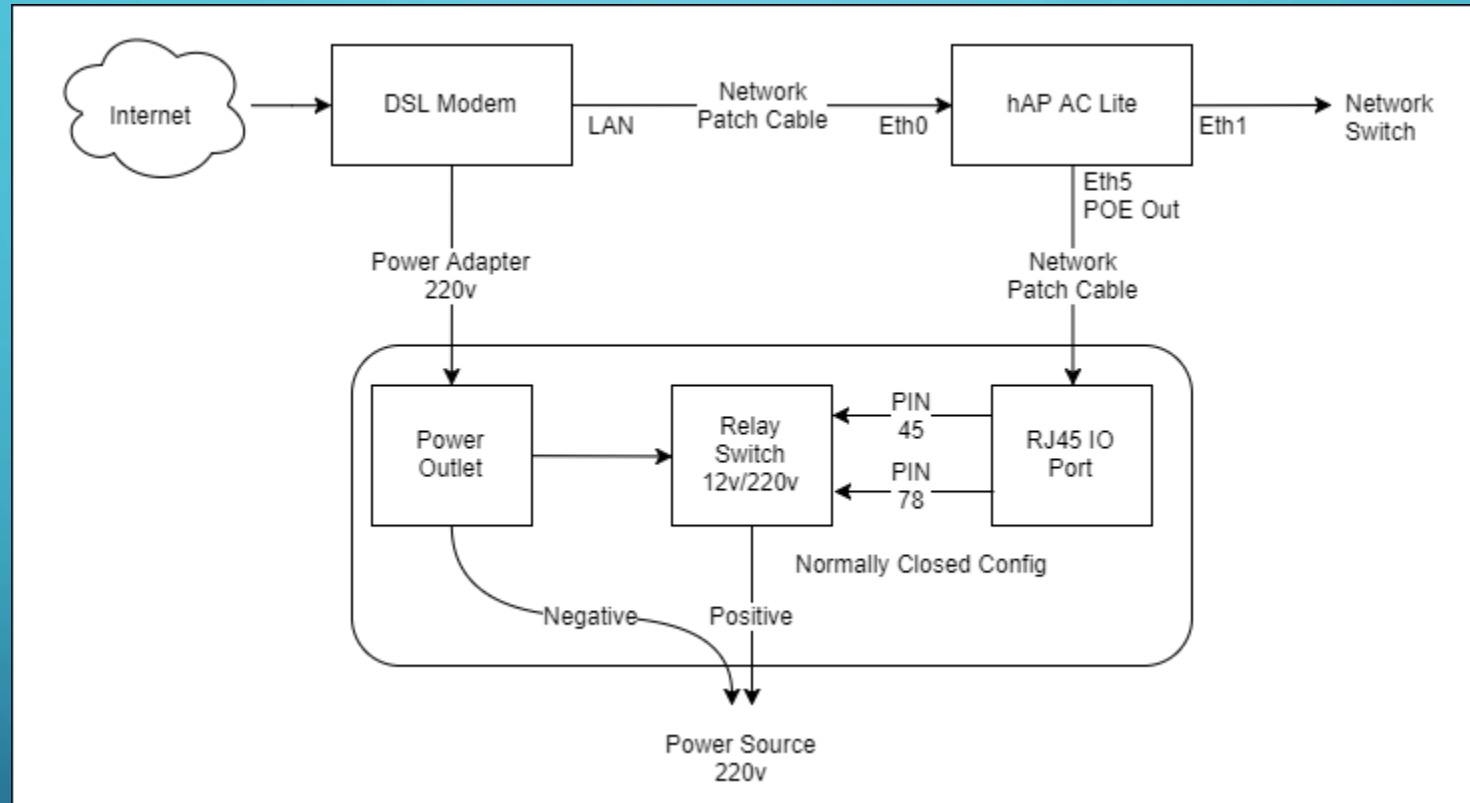
When power is introduced to the POE Out on Eth5, the Relay Switch disconnects the positive line from the power source.

NETWATCH

NETWATCH

Netwatch Host <8.8.8.8>

Host | Up | **Down**

On Down:

```
:local avgRtt 0
:local pout 0
:local pin 0
:local ploss 0

/tool flood-ping 8.8.8.8 count=10 do={
  :if ($sent = 10) do={
    :set avgRtt $"avg-rtt"
    :set pout $sent
    :set pin $received
  }
}
:local ploss (100 - (($pin * 100) / $pout))
:local logmsg ("Ping Average for 8.8.8.8 - ".[:tostr $avgRtt]."ms - packet loss: ".[:tostr $ploss]."%")
:log info $logmsg

:log warning "Restarting PoE";

:if ($ploss >= 50) do={
        :if ([:len [/system script job find where script="PowerCycle ( PoE )"]] > 0) do={
                        :log warning "Another copy of monitoring script is running.. restarting the job.."
                        /system script job remove numbers=[find script="PowerCycle ( PoE )"]
                        :delay 2s
                        /system script run "PowerCycle ( PoE )"
        } else={
                        /system script run "PowerCycle ( PoE )"
        }
}
```

OK | Cancel | Apply | Disable | Comment | Copy | Remove

enabled

SCRIPT

Script <PowerCycle (PoE)>

Name: PowerCycle (PoE)

Owner: admin

Policy:
- ☑ ftp
- ☑ read
- ☑ policy
- ☑ password
- ☑ sensitive
- ☐ dude
- ☑ reboot
- ☑ write
- ☑ test
- ☑ sniff
- ☑ romon

Last Time Started: Jan/02/1970 00:17:44

Run Count: 4

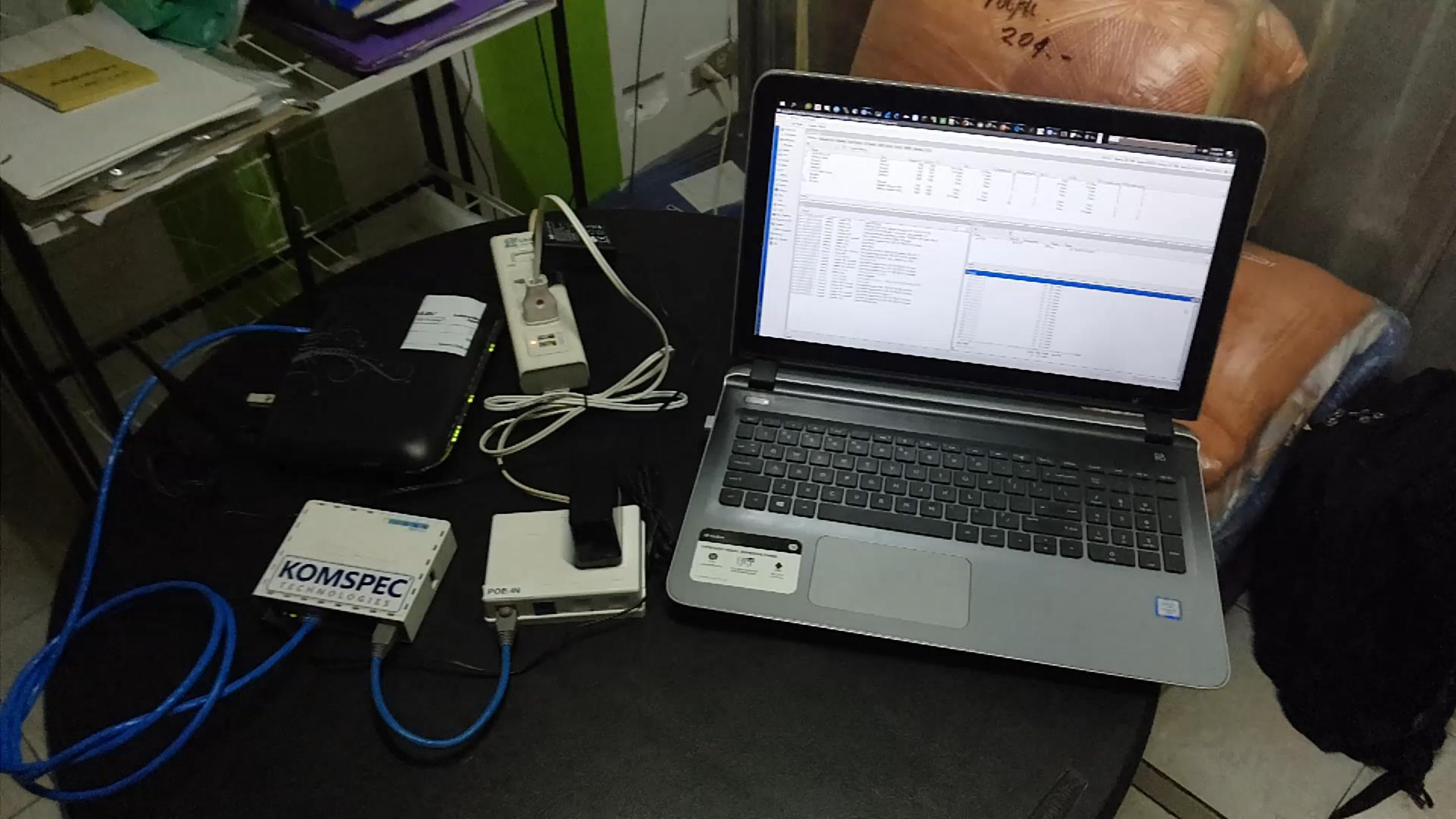OK | Cancel | Apply | Comment | Copy | Remove | Run Script

Source:

```
/log warning "Turning PoE to 'Forced On'"

:local PoeOut [/interface ethernet poe get value-name=poe-out number=ether5]

:if ($PoeOut != "forced-on") do={
        /interface ethernet poe set poe-out=forced-on numbers=ether5
        /log warning "Successfully Turned on... waiting 5 seconds till turning it 'Off'"
} else={
        /log warning "PoE is already on Forced-On... continuing to 5 seconds delay..."
}

/log warning "check delay"
:delay 5s
/log warning "check delay - end"

/log warning "Turning PoE to 'Off'"
/interface ethernet poe set poe-out=off numbers=ether5
/log warning "Success!... Script Exit"
```

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SCRIPT

```
/log warning "Turning PoE to 'Forced On'";
 :local PoeOut [/interface ethernet poe get value-name=poe-out number=ether5];

:if ($PoeOut != "forced-on") do={
/interface ethernet poe set poe-out=forced-on numbers=ether5;
/log warning "Successfully Turned on... waiting 5 seconds till turning it 'Off'";
} else={
/log warning "PoE is already on Forced-On... continuing to 5 seconds delay...";
}

/log warning "check delay";
:delay 5s;
/log warning "check delay - end";

/log warning "Turning PoE to 'Off'";
/interface ethernet poe set poe-out=off numbers=ether5;
/log warning "Success!... Script Exit'";
```