



# National e-Government Network

Network Operation Center(NOC)

Bangladesh Computer Council

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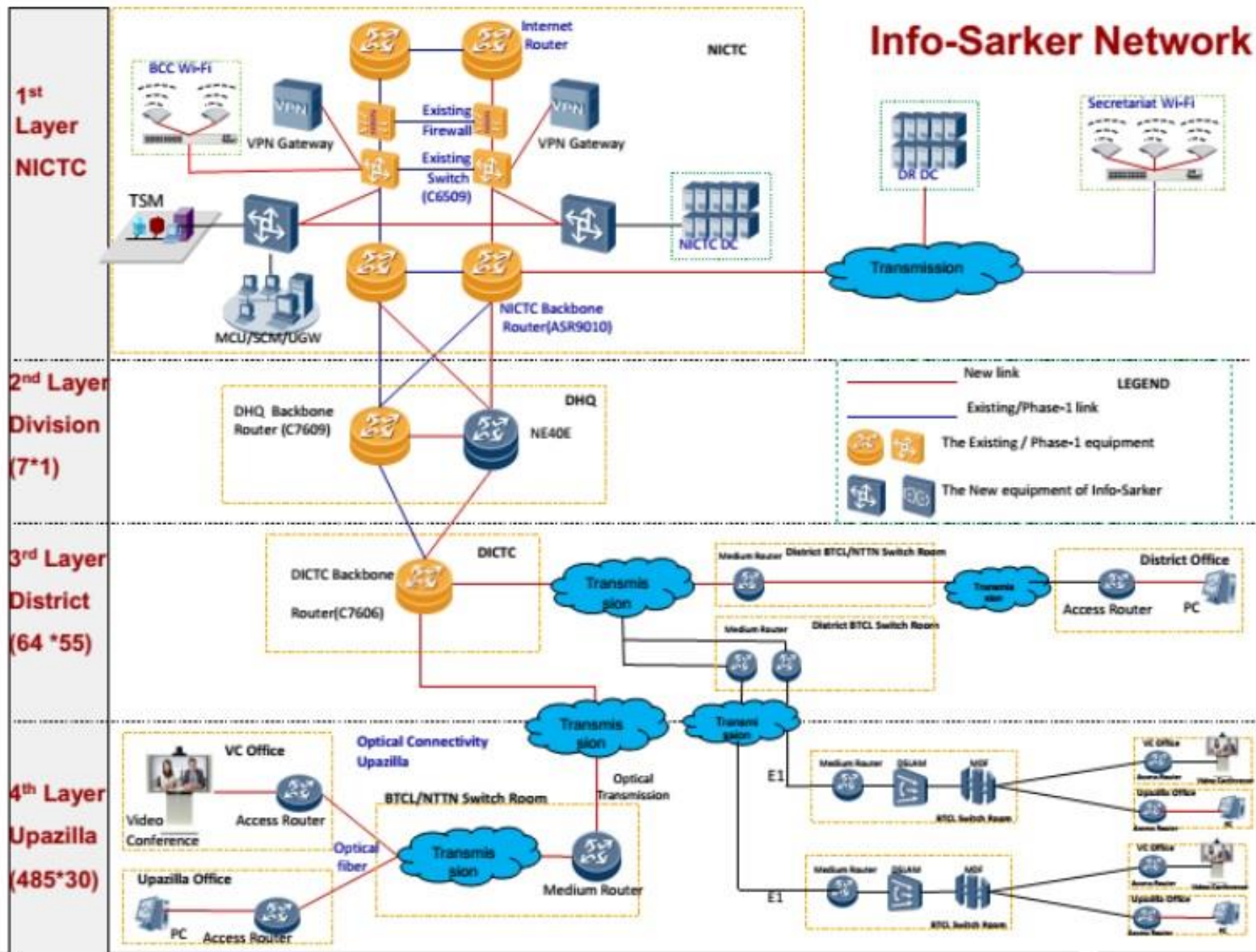
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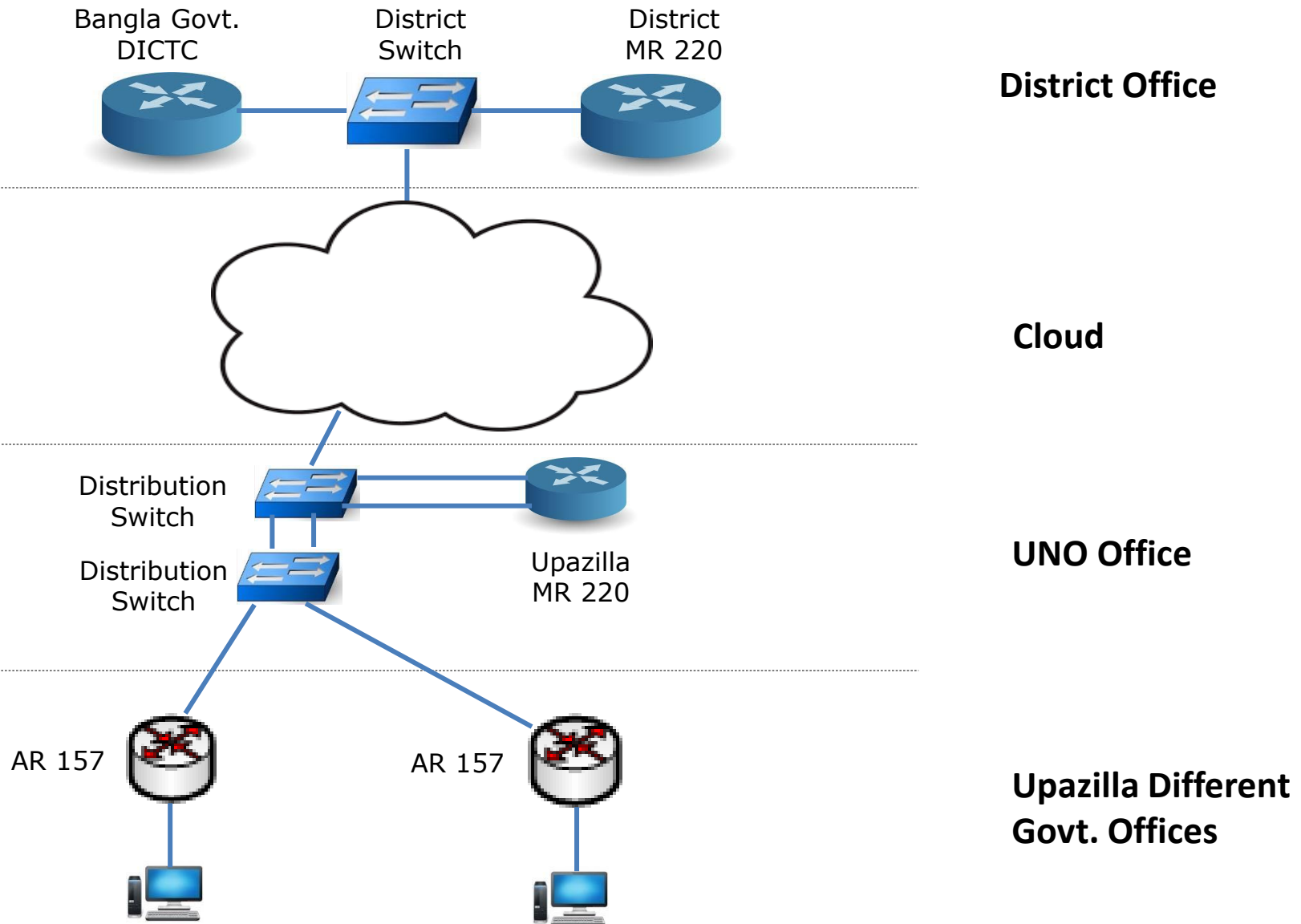
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**Escalation Matrix**



# Introducing Basic Network Topology



# Scope of Maintenance Work

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## **NTTN SCOPE:**

- NTTN Internal IP Network**
- Optical fiber Cable**
- Media Converter**
- LAN Cable**
- Patch cord**

## **BCC SCOPE:**

- Medium Router (MR)**
- Bangla Govt. Router (Cisco)**
- LAN Cable (NTTN Switch to MR & Bangla Govt. Router)**
- Patch cord (NTTN Switch to MR & Bangla Govt. Router)**

# Introducing Basic Network Devices

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## Huawei AR 157 Router



Front Side View



Back side View

## Media Converter & patch Cord



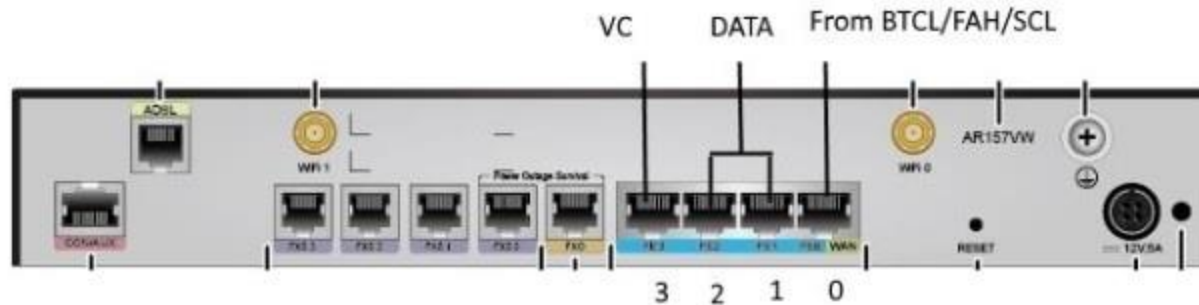
## LAN Cable (CAT-5/6)



# Physical Connectivity at Last Mile Office

## A) Physical Connection Check:

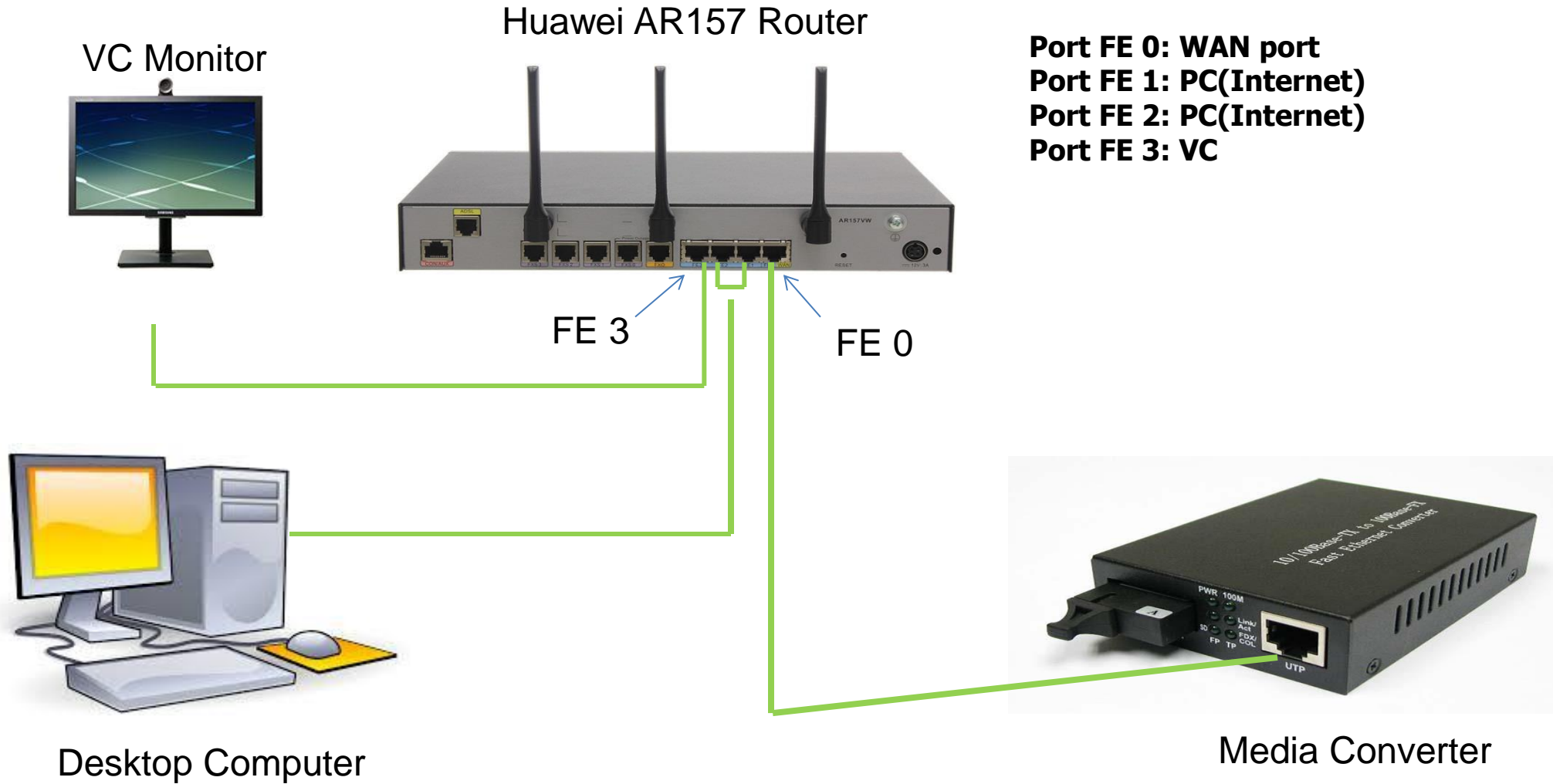
**RouterAR157VW: Connect Cable with DATA Port 1 or Port 2 as Picture**



**RouterAR1220VW: Connect Cable End using DATA Port 0,1,2,4,5 as Picture**



# Physical Connectivity at Last Mile Office



# Materials List at Client End

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## DC Office (Aggregation)

Item Name	Quantity
MR	01
Banglagov Router	01
AR	01
MC (D-link / On net)	01
LAN cable	02
D-Link Switch	02/03

## UNO Office (Aggregation)

Item Name	Quantity
MR	01
AR	01
MC (D-link / On net)	01
LAN cable	02
D-Link Switch	02

## Last mile Office

Item Name	Quantity
AR	01
MC (D-link / On net)	01
LAN cable	02

# Fault Identification & Fault Handling Process

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## **POWER SUPPLY:**

- ❑ Ensure power source of device (MC & Huawei Router AR157) connection 24/7



# Fault Identification & Fault Handling Process

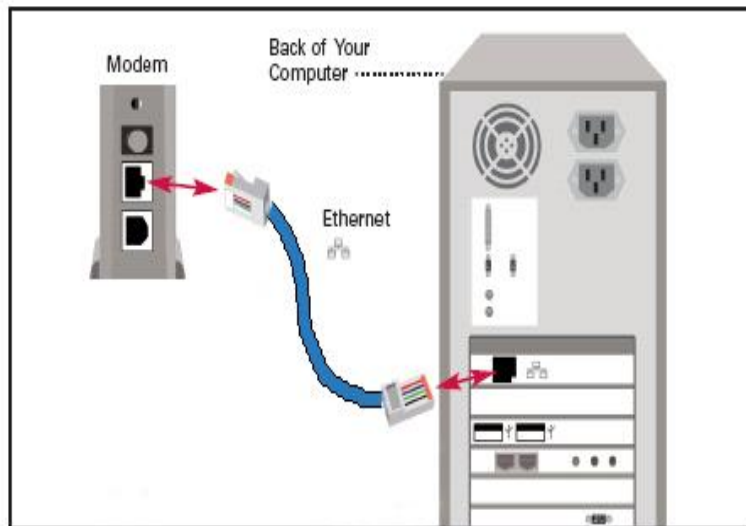
## Restart Computer.....



# Fault Identification & Fault Handling Process

## PHYSICAL CONNECTIVITY:

- ❑ Avoid loose connection of LAN cable
- ❑ Ensure proper connection of MC to Router

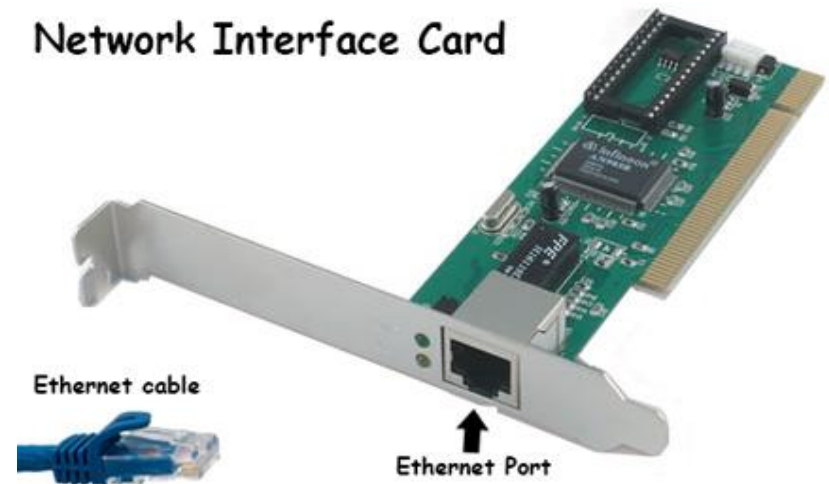


# Fault Identification & Fault Handling Process

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## LAN CARD AND LAN DRIVER:

- ❑ Ensure presence of LAN card insert CPU
- ❑ Ensure the installation of LAN card driver on PC



# Fault Identification & Fault Handling Process

## AR157 Router LED Status:

System Running

PC to Router Connectivity (LAN)



Power On

WAN/ Uplink

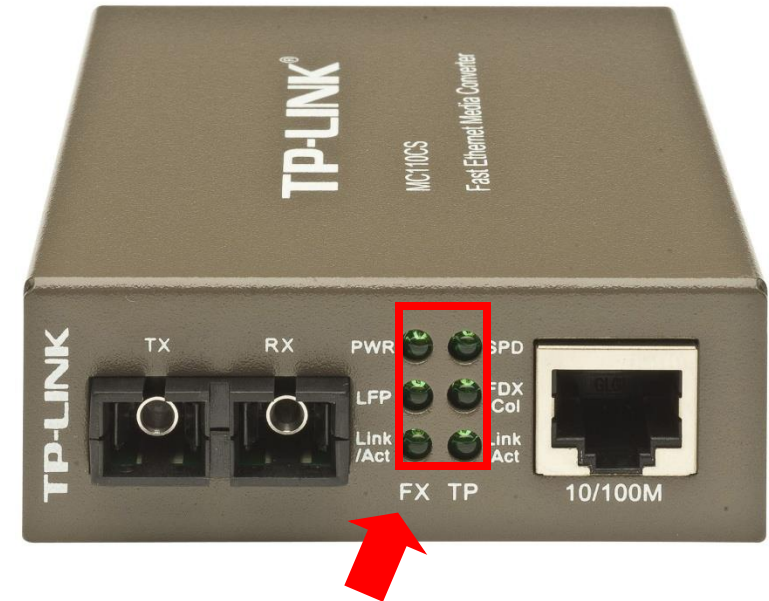


If the lights are ON at same time,  
then the router should be hang

# Fault Identification & Fault Handling Process

## MC (Media Converter) STATUS:

- ❑ Ensure the power LED (on /off)
- ❑ Identify the MC all LED (on /off)
- ❑ Check the FX/FP LED (on/off)
- ❑ Check the TX/TP LED (on/off)



# Fault Identification & Fault Handling Process

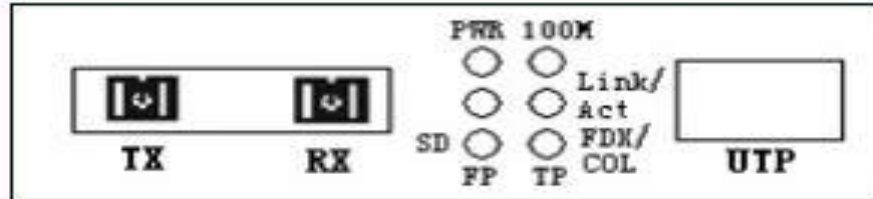


Fig. 1: Front panel for dual fiber media converter

LED	Status	Description
PWR	On	Power supply is normal
	Off	Check power supply
100M	On	TP Port Link speed is 100 Mb/s
	Off	TP Port Link speed is 10 Mb/s
TP Link/Act	On	TP Link connected
	Blink	Data transmission
	Off	TP Link fail
FP Link/Act	On	Fiber Port Link connected
	Blink	Data transmission
	Off	Fiber Port Link fail
FDX/ COL	On	TP Port works in full duplex mode
	Off	TP Port works in half duplex mode
SD	On	Fiber Port signal detected
	Off	Fiber Port signal not detected

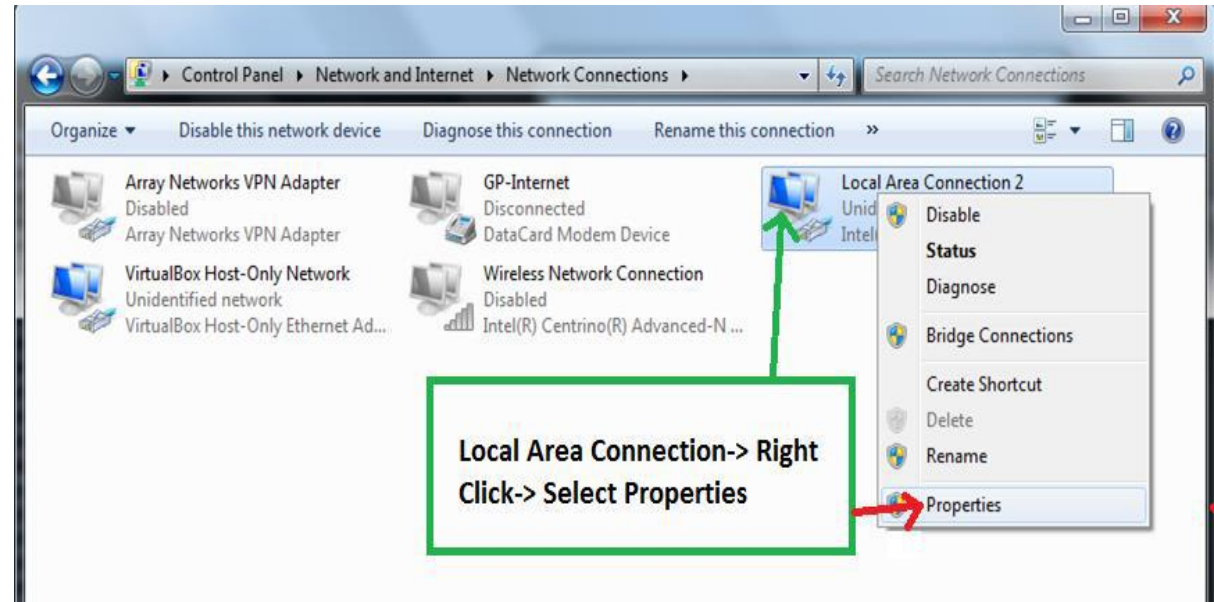
## Media Converter LED Status:



# Connectivity Connection Check:

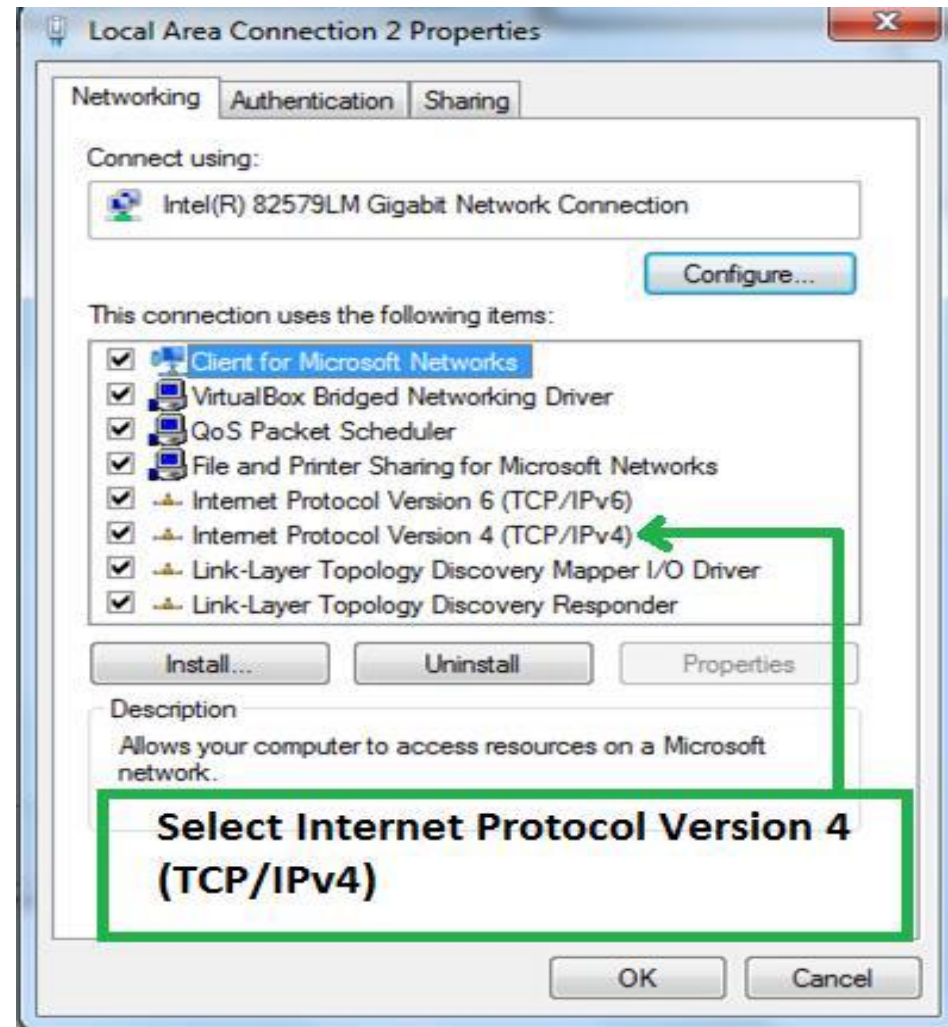
Open your Desktop/laptop  
Got to Control Panel  
->Network Connection

Go to LAN Connection  
->properties  
Local Area Connection/  
Network



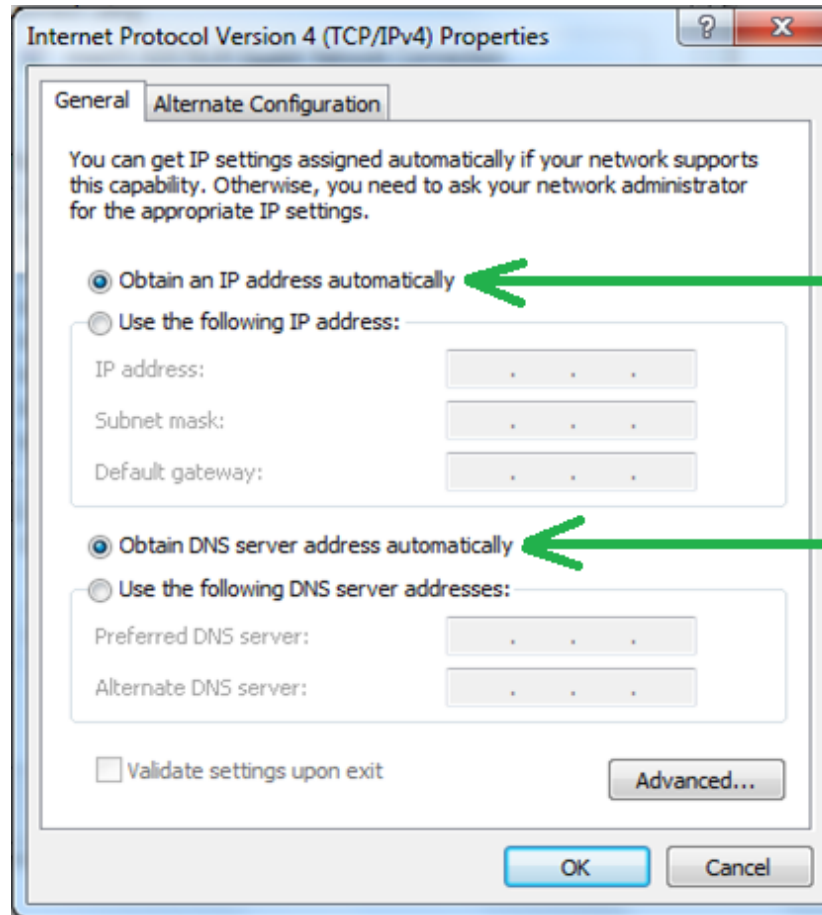
# Connectivity Connection Check:

2<sup>nd</sup> Step:



# Connectivity Connection Check:

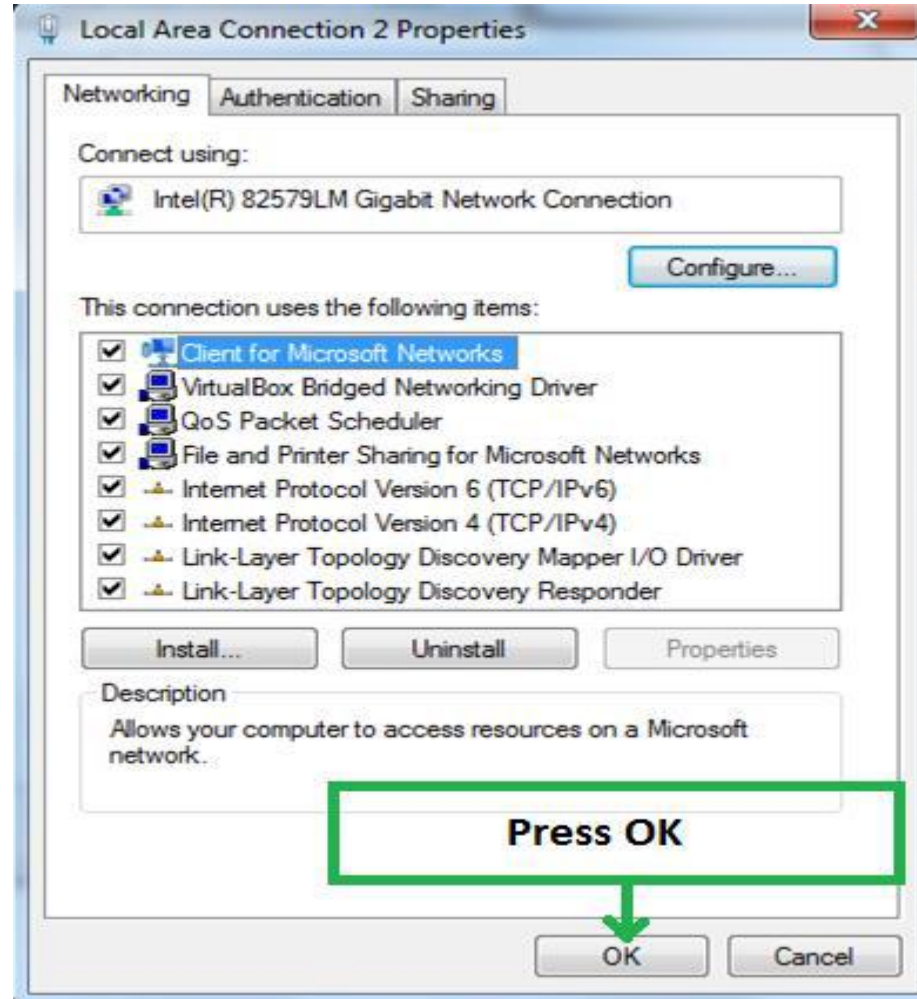
3<sup>rd</sup> Step:



Select Obtain an IP Address automatically & Obtain DNS server address automatically-> then press OK

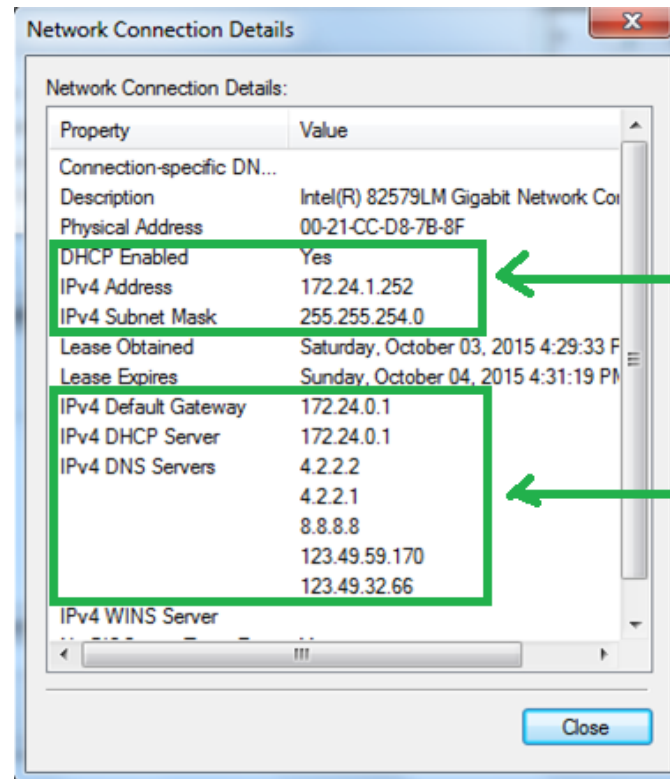
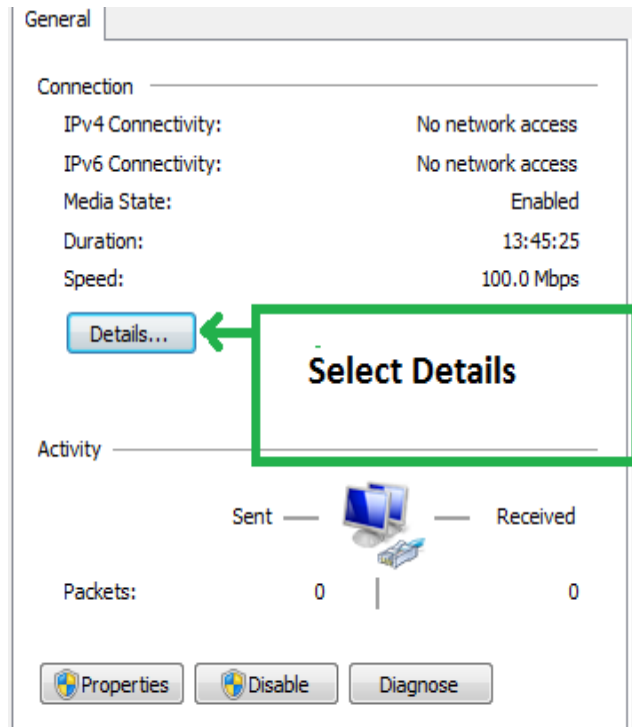
# Connectivity Connection Check:

Finish this Process to Press OK



# Connectivity Connection Check:

Got to Control Panel ->Network Connection Go to Local Area Connection/ Network



# Connectivity Connection Check:

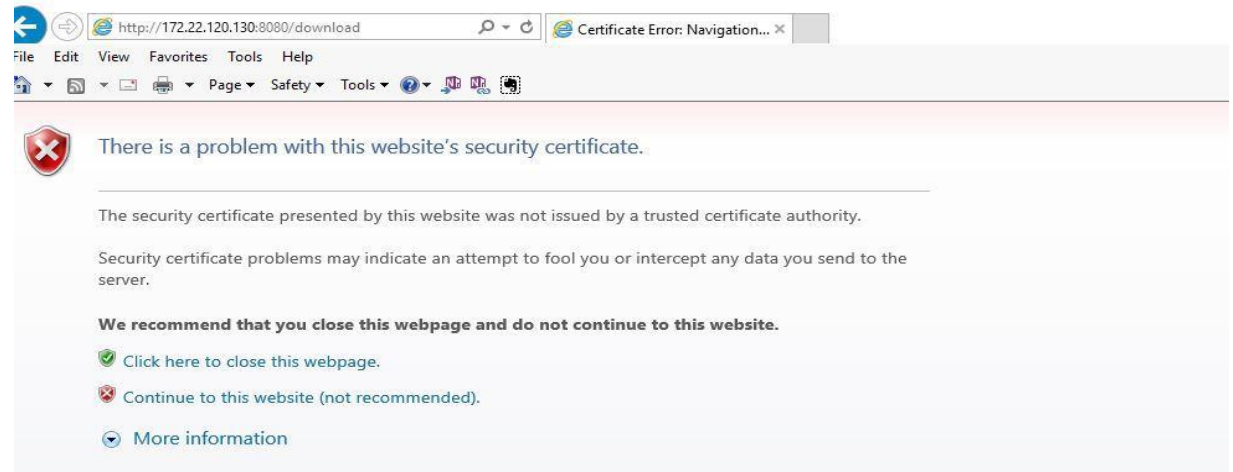
For open command prompt  
->Ctrl + R

```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\A00307777>cd\

C:\>
C:\>
C:\>ping 4.2.2.1 -t

Pinging 4.2.2.1 with 32 bytes of data:
Reply from 4.2.2.1: bytes=32 time=570ms TTL=49
Reply from 4.2.2.1: bytes=32 time=541ms TTL=49
Reply from 4.2.2.1: bytes=32 time=543ms TTL=49
Reply from 4.2.2.1: bytes=32 time=604ms TTL=49
```



# Fault Identification & Fault Handling Process

## Terminal Security Management (TSM) NAC log-in:

- ❑ Install TSM software in your Computer.
- ❑ Put user name & password provided by BCC to log-in into NAC Agent .
- ❑ Select save password & authentication option.
- ❑ Account name is Different and Password is Common (Infosarker2)
- ❑ Put the actual server IP - (Dhaka-172.22.120.131) in advance option.

<http://infosarker.bcc.net.bd/tsm>



The screenshot shows the NAC Agent login window. The title bar reads "NAC Agent [Server not connected]". The window contains the following fields and controls:

- Account type: Common account (dropdown menu)
- Account: Ufpo\_Munshiganjsadar (text input)
- Password: [Redacted with dots] (password input)
- Save password:  (checkbox)
- Auto authenticator:  (checkbox)
- Forget password: (text link)
- Buttons: Advanced>>, Login, Close



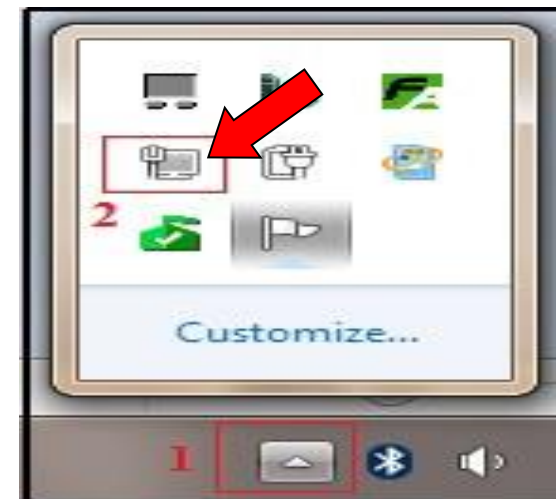
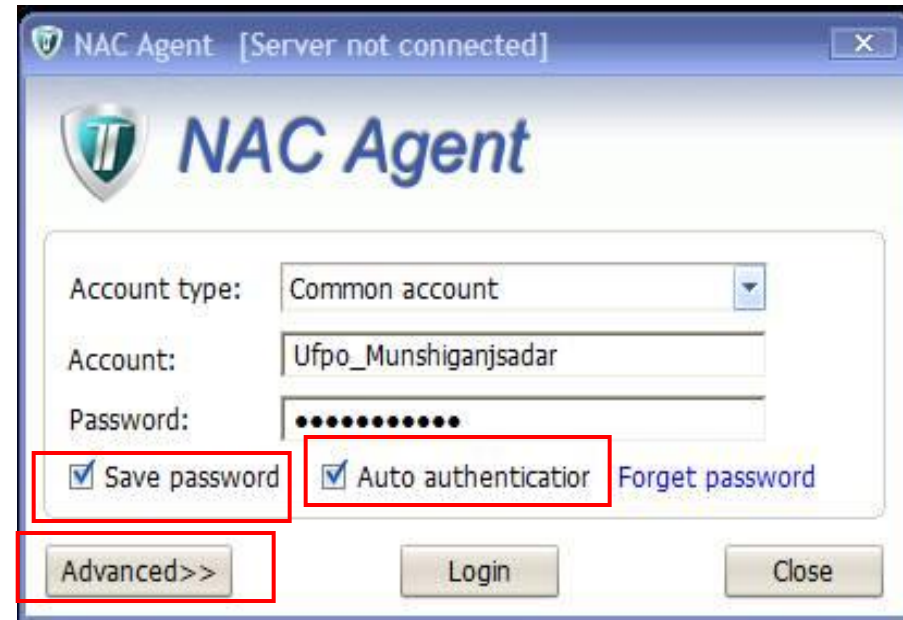
The screenshot shows the NAC Agent login window with the "Advanced" options expanded. The title bar reads "NAC Agent [Server not connected]". The window contains the following fields and controls:

- Account type: Common account (dropdown menu)
- Account: Dagrio\_Dhaka (text input)
- Password: [Redacted with dots] (password input)
- Save password:  (checkbox)
- Auto authenticator:  (checkbox)
- Forget password: (text link)
- Buttons: Advanced<<, Login, Close
- Connect Setting section:
  - Server: 172.0.0.1 (dropdown menu)
  - Restore Default: (text link)
  - Save: (button)

# Fault Identification & Fault Handling Process

## TSM (NAC) log-in:

- ❑ If login okay then check the PC network icon
- ❑ If found error code- 204 please check again previous procedure



# Connectivity Connection Check:

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Authentication Process

# Fault Identification & Fault Handling Process

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## Error Code:

- **Error Code 204:**
  1. The IP address of the server is incorrectly specified.
  2. The terminal host and server are un-routable.
- **Error Code 207:**

Slow Network connection resulting in authentication timeout.
- **Error Code 1106:**

Account name or password is entered incorrectly
- **Error Code 1506:**

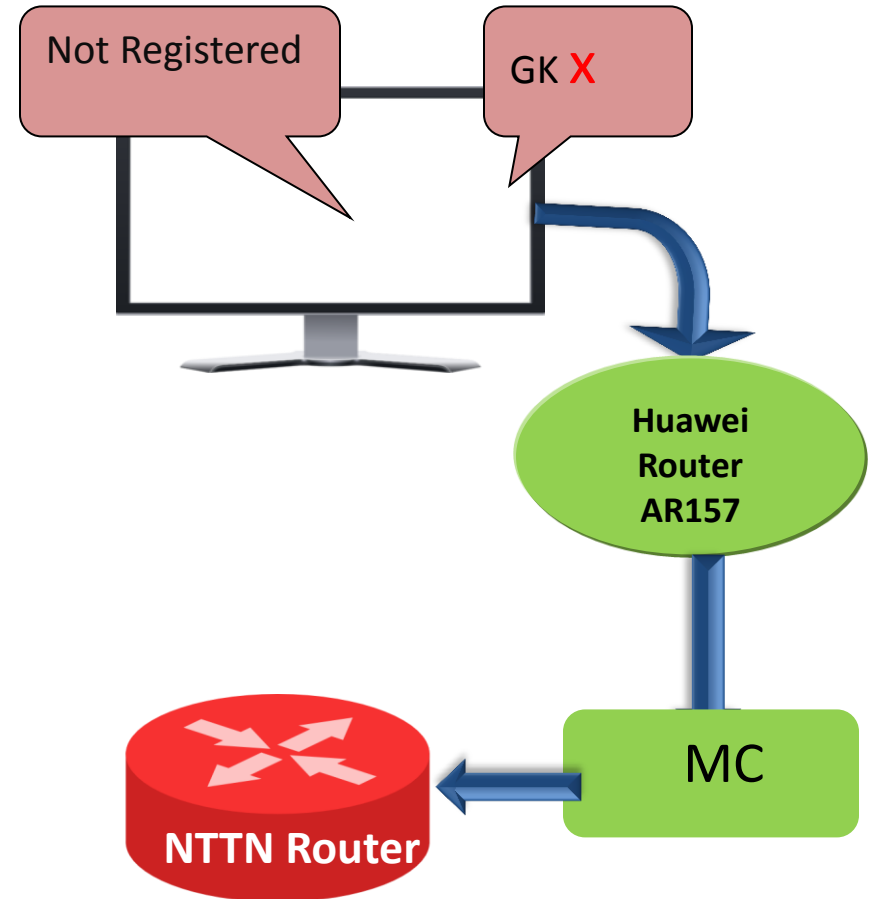
Although it's an error, but client connectivity is okay and client can use internet.
- **Error Code 503:**

Web server is currently unable to handle the HTTP request due to a temporary overloading or maintenance of the server.

# Fault Identification & Fault Handling Process

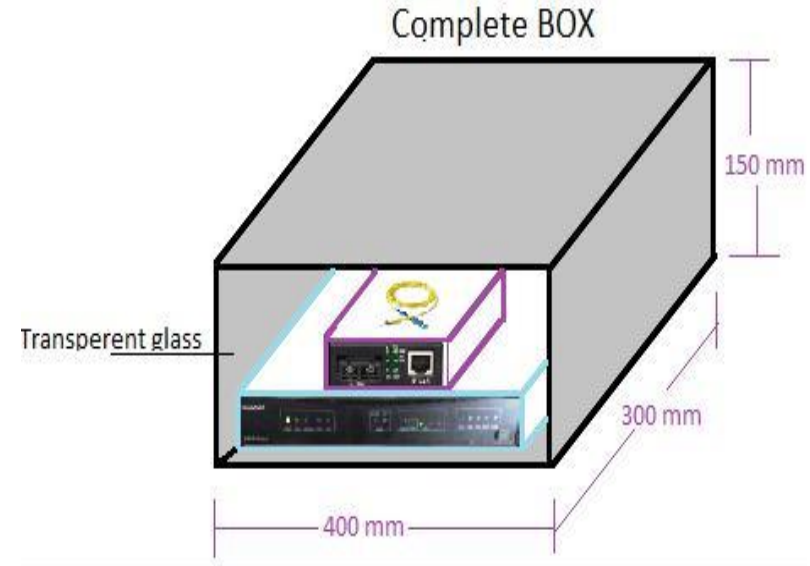
## Vedio conference (VC):

- If found (GK cross ), check-
- ✓ VC monitor to Huawei router LAN cable
- ✓ MC to Huawei router
  
- If found Not regestered window then communicate with BCC concern

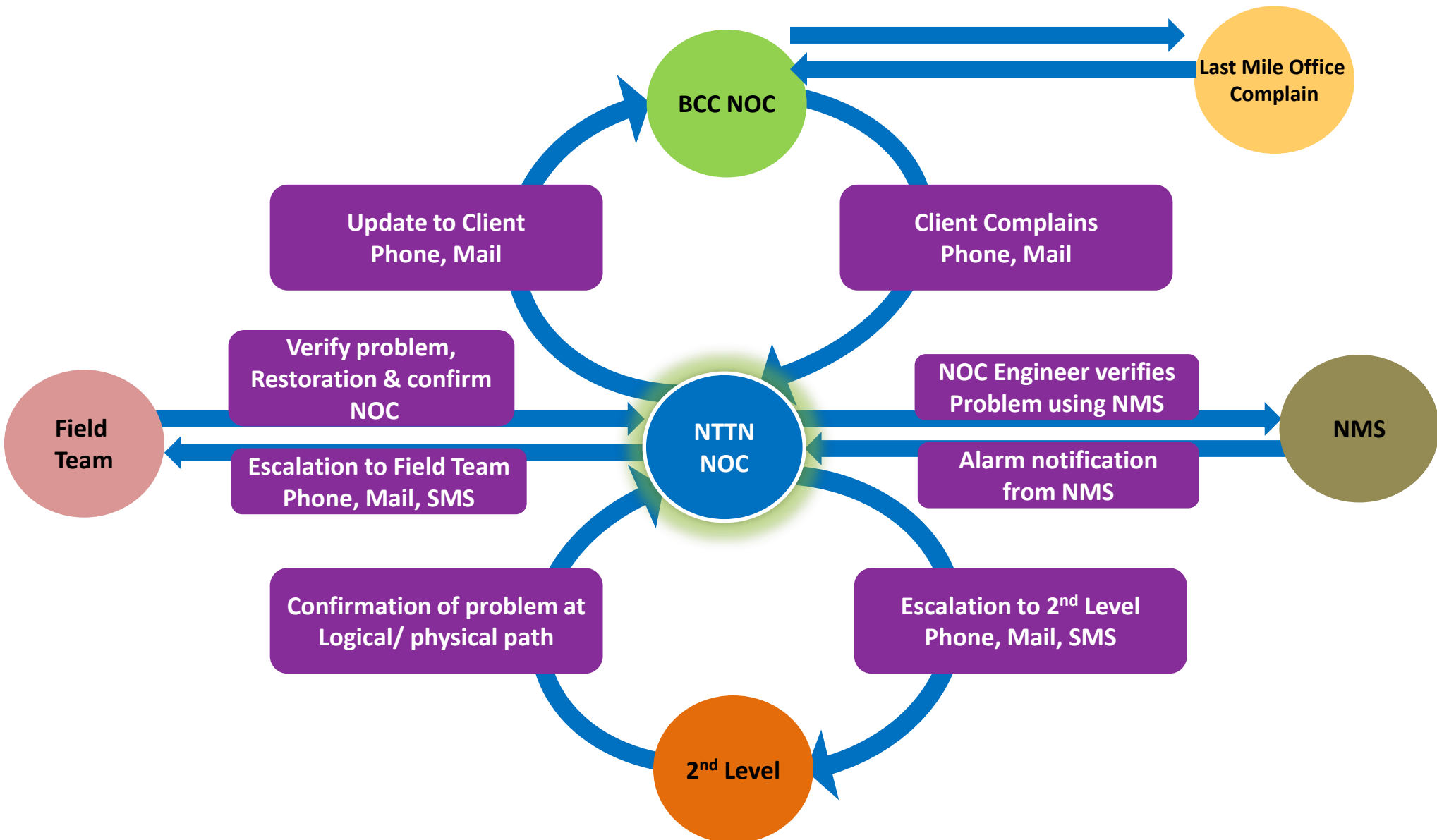


# Safety and Awareness

- ❑ Keep away devices from dust & liquid.
- ❑ Keep the device in safety place.
- ❑ Keep away the LAN cable and Patch cord from the Rat.



# Fault Escalation & Feedback Process



**1st contact BCC NOC (For all issue)**

**Phone No.: +88 02 55006823 or +88 02 8181029**

**Email: [noc@bcc.gov.bd](mailto:noc@bcc.gov.bd)**

