**Configuration of ELAN Card of MADM as Layer 2 switch**

 Due to shortage of FE ports in NIB switch, it was not possible to provide lease line like Internet LL or MPLS circuits at present. To overcome this problem in Guwahati, We configured the ELAN card of Tejas MADM as a Layer 2 switch.

 The diagram of connectivity as bellow

Copper Pair

Modem

2 Pair to Ethernet conv

Costumer

FE

CAT 5/6 Cable

MADM ELAN Card as L2 Switch

32/64 FE Port

FE

Link

STM

Station A

STM B

Station B

GE/FE Link

Costumer

Premises

Optical to

Electrical ETH Conv

OFC

NIB

P Router

FE

**Following change or Steps for configure ELAN card as Layer 2 switch**

We connect GE port 33 with NIB P-Router GE port.

 **STEP 1:** In switch configuration change Bridge Tag mode from QinQ to 802.1q switching

**STEP 2:** Edit switch parameter of GE port 33, and given VLAN Id-1

**STEP 3:** Edit switch parameter of VCG 109, and given VLAN id-1

**STEP 4:** In VLAN provision a new VLAN:

 VLAN Id-1000

 VLAN Name-Prouter 1

 Include GE port 33 and VCG 109 (both are tagged) and create the Vlan

**STEP 5:** Click on QOS->Ports Rate Limiting and edit GE port 33

|  |  |
| --- | --- |
|  **Enable Ingress Rate Limiting** |   |
| **Ingress CIR (kbps)** |  |
| **Ingress CBS (KB)** |         |
| **Enable Ingress Pause Threshold** |   |
| **Pause Threshold** |      |
| **Resume Threshold** |       |
| **Enable Egress Rate Limiting** |   |
| **Egress CIR (kbps)** |  |
| **Egress CBS (KB)** |         |



 These steps are for initial configuration. Now for creation of every circuit steps are as follows,

 Suppose we have to provide the 4 Mbps Ethernet circuits to any customer. We connect the customer link at FE port FE-1(electrical for ex), Vlan given by NIB is 3034.

**STEP 1:** Edit switch parameter of FE Port 1, and give VLAN ID-3034

**STEP 2:** In VLAN provision a new VLAN:

 VLAN Id-3034

 VLAN Name-Customer Name

 Include GE port 33(Tagged), FE Port 1(UnTagged) and VCG 109 (tagged) and create the Vlan

 **STEP 3:** Click on QOS->Ports Rate Limiting and edit FE port 1

|  |  |
| --- | --- |
| **Enable Ingress Rate Limiting** |   |
| **Ingress CIR (kbps)** |  |
| **Ingress CBS (KB)** |         |
| **Enable Ingress Pause Threshold** |   |
| **Pause Threshold** |        |
| **Resume Threshold** |      |
| **Enable Egress Rate Limiting** |   |
| **Egress CIR (kbps)** |  |
| **Egress CBS (KB)** |         |



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