Migration Plan for MYREN Central 1 POP Cyberjaya

Sharizan Sumuui
MYREN NOC

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CURRENT MYREN CORE NETWORK

- 10-40Gbps
- Total capacity 170Gbps
Relocation Objective and Migration Plan

1. Government Policy
2. Saving
3. Optimizing government resources

- Relocation of **5 upstream links** & connectivity to **19 access sites**
- 0 **Internet connectivity** downtime
- Minimum **access sites** downtime
- <24 hours **Asi@Connect link** downtime
CURRENT MYREN CORE NETWORK

North (USM) ➔ Sabah (UMS)
Sabah (UMS) ➔ Sarawak (UNIMAS)
Sarawak (UNIMAS) ➔ Central2 (Universiti Malaya)
Central2 (Universiti Malaya) ➔ Central1 (Cyberjaya)
Central1 (Cyberjaya) ➔ North (USM)

TEIN, Tier1, MyIX, Google, MyGovNet (31G)
Internet (10G)

Total core link - 170Gbps

10 Gbps
40 Gbps
20 Gbps
Upstream links
45 minutes on road
For Central1 POP relocation, it is proposed that design is according to the next slide for the following justification

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<tr>
<th>No</th>
<th>Suggestion</th>
<th>Justification</th>
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| 1   | Co-locate Internet router at CX1 DC within Cyberjaya for connectivity to TEIN, Tier1, MyIX and Google | • Link to MyIX and Google is currently terminating at the same DC  
• More choices for Tier1 provider and lower cost  
• Avoid relocation charges by TEIN last mile provider |
| 2   | Restructuring Core link sizes                                              | • The total core link size is remain at 170Gbps  
• The restructuring of Core link sizes is necessary to achieve the best design, considering current utilization as well as redundancy and reliability. |
PROPOSED NEW MYREN CORE CONNECTIVITY
MIGRATION ACTIVITY

North (USM) - Cisco XR12410
   Max Capacity: 320Gbps

Central1 (Cyberjaya)

Central2 (Universiti Malaya)

South (UTM)

Sabah (UMS)

Sarawak (UNIMAS)

East Coast

TEIN, Tier1, MyIX, Google, MyGovNet (41G)

Internet (10G)

10 Gbps
40 Gbps
20 Gbps
Upstream links
MIGRATION ACTIVITY – STAGE 1

1. Break the etherchannel into single 10G link

North (USM)

Central1 (Cyberjaya)

Central2 (Universiti Malaya)

South

TEIN, Tier1, MyIX, Google, MyGovNet (41G)

Internet (10G)
MIGRATION ACTIVITY – STAGE 2

1. Turn up temporary Core router

2. Move Core router, PE02 and IBR02 to Enstek DC

3. Turn up connectivity to MYREN Core network

4. Turn up connectivity to upstream link

Central1 (Cyberjaya)
- Cisco XR12410
- Max Capacity: 320Gbps

Central2 (Universiti Malaya)
- Internet (10G)

North (USM)
- Central2 (Universiti Malaya)
- Enstek DC

South
- Central1 (Cyberjaya)
- Enstek DC

Internet (10G)
- TEIN, Tier1, MyIX, Google, MyGovNet (41G)

Central1 (Cyberjaya)
- Internet (10G)
MIGRATION ACTIVITY – STAGE 3

1. Move Internet router1 to CX1 DC
2. Turn up connectivity to MYREN Core network
3. Turn up connectivity to upstream link
4. Migrating access sites

North (USM)
South (UMS)
Sarawak (UNIMAS)
Central2 (Universiti Malaya)
East Coast

Central1 (Enstek DC)
Cyberjaya (CX1 DC)

Internet (10G)
TEIN, Tier1, MyIX, Google, MyGovNet (41G)

Cisco XR12410
Max Capacity: 320Gbps

10 Gbps
20 Gbps
MIGRATION ACTIVITY – STAGE 4

- Internet (10G)
- MyGovNet (10M)
- TIEN (1G)
- Tier1 (10G)
- MyIX (10G)
- Google (20G)

- Total core link - 170Gbps

Link speeds:
- 10 Gbps
- 20 Gbps
- 30 Gbps
- Upstream links