

RESEARCH & EDUCATION NETWORK FOR UGANDA (RENU)

IPv6 DEPLOYMENT SCENARIO

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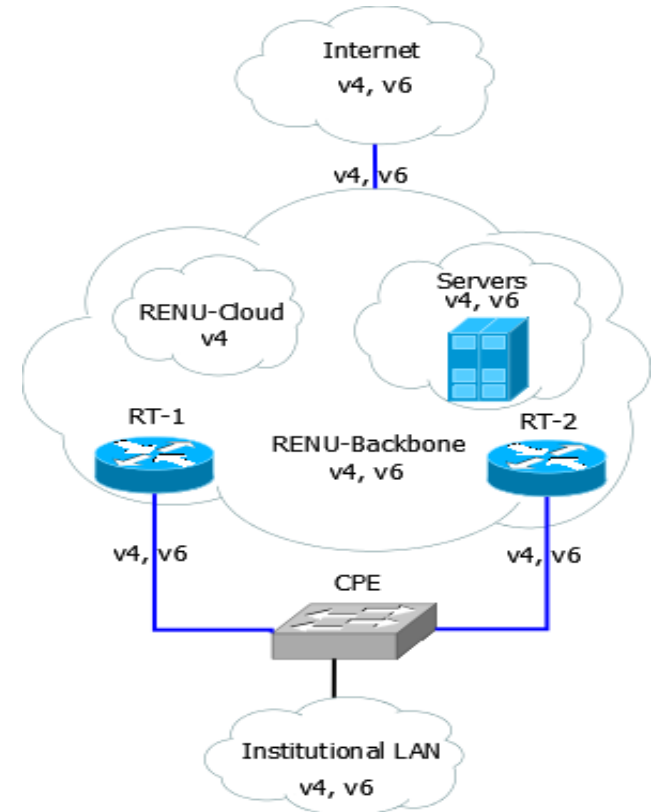
Network Overview

Access/lastmile technology

- Fiber Optics
- Protocols:
BGP, BFD & static routes, VRRP

Backbone

- 6 PoPs
- Protocols:
ISIS, BGP, MPLS/RSVP



Dual Stack Deployment

Challenges

- Incapable nodes: for dual full routing tables (*cost of dual stack*) – **Default + new nodes**
- Unified BW policer for both protocols – **Per protocol policing**
- Legacy nodes at institutions: No v6 support
- License upgrade cost
- Adoption in open stack
- CDN caches at IXP – No v6

Boosting points

- Training engineers: NREN + Institutions'
- Available public v4 for backbone routing
- ISIS instances in backbone
- Direct Engineering Assistance (DEA) program
- Donation of capable core equipment (*NSRC support*)

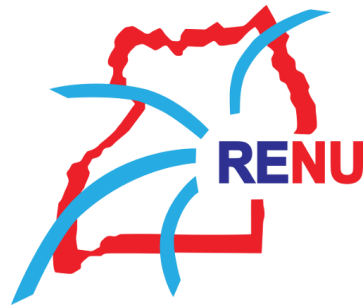
Institution adoption strategy

- Training of engineers
- Deployment through DEA
 - IP plan
 - DNS
 - DHCP ...
- Donation of capable equipment



More work...

Gathering measurements and proving success



THE END