

Optical Network Diversity

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Agenda

- Current AARNet3 Network
- AARNet Optical Network topology
- Weaknesses of current backbone topology
- Steps to address weaknesses
- Regional Customer connection topologies
- Customer steps to reduce weaknesses.

Current AARNet3 Network

- Diverse PoPs in major capitals
- 10Gbps wavelengths across AARNet optical segments
- Other carrier services for diversity where our Optical Network is not diverse. eg. ADL-PER, MEL-ADL
- Diagram....

Current topology weaknesses

- Diverse fibre, but single optical PoPs
- Reliable so far, but PoP failures happen
- PoP failures:
 - BNE-B
 - MEL-B
 - CBR-B
- Inter-capital & PoP

Addressing weaknesses

- Plans for diverse Optical PoPs in Sydney, Melbourne, Canberra & Brisbane
- Next 12 Months
- I expect to be busy!
- There will be scheduled outages!

Regional Connection Topologies

- Typical connection to CEV
- Most use “Milk Run” fibre with CWDM
- Typical diagram
- Examples:
 - Albury
 - Bathurst/Orange
 - Wollongong
 - Lismore