

EN4R – EXPERIMENTAL NETWORKS FOR RESEARCHERS

INTRODUCTION

EN4R is an AARNet initiated program that is designed to encourage researchers to think differently about how geographically disparate sites can be connected together.

The essence of this program is that a limited number of circuits on the AARNet optical network are being made available to the Australian research community for nominated projects.

To encourage the community to think experimentally about long haul links, access charges for the first six or twelve months are waived and there is no restriction on the minimum duration of the agreement.

ENABLING APPLICATIONS

Within the research community, optical circuits have been used to provision connections between geographically disparate sites for various reasons. Directly connecting sites with circuits is especially suitable in applications that require any of the following qualities: dedicated bandwidth; LAN extension; low jitter; or, increased security.

However, given the qualities of a direct connection the reality is that there is no bound for the number of applications that could potentially benefit from a dedicated circuit.

AARNet is encouraging new and innovative proposals for the use of circuits in this program. Hence circuits can be used to support research activities in (but not limited to) the Social Sciences, Hard Sciences, or the Arts.

ELIGIBILITY AND ADMISSION

As there is only a limited number of circuits available on the optical network, there is a process to ensure that projects competing for the same resource will be dealt with fairly. This process includes:

- All proposals to use an optical circuit under this program must be submitted to the AARNet Research Community.
- A committee of peers in the research community will rank proposals based on potential research merit.
- Proposals will only be accepted from researchers affiliated with institutions that have a current full AARNet subscription.

ACCEPTABLE USE

All traffic carried on a circuit provisioned under this program must be non-commercial in nature. The purpose of this program is to provide researchers with a mechanism to explore different modalities of communication between geographically separated locations.

To support collaboration between researchers of different organisations under this program, a circuit can be provisioned between any two locations as long as one is to an institution with a full AARNet subscription.

WHAT ARE OPTICAL CIRCUITS?

An optical circuit is a term used to describe a private network service that traverses at least one leg of the AARNet optical network.

Optical circuits have the following characteristics:

- They are provisioned in 1 gigabit capacity with bandwidth reservation ensuring that the end user has access to 100% of the rated capacity;
- They are point to point, hence it is not possible to connect more than two sites to the same service;
- They can extend your Local Area Network. The equipment carrying the service is transparent to the service itself hence two physically separate locations can be engineered to be on the same LAN segment.

WHERE CAN A CIRCUIT BE DELIVERED?

A requirement for provisioning an optical circuit is that there must be the capability to connect to an AARNet POP at both ends.

An optical circuit can be delivered anywhere as long as there is existing capacity for each of the required tail connections. In some circumstances AARNet may be able to provide a tail service to your location.

APPLYING

Applications must be submitted on the prescribed Application Form

CONTACT

Further information regarding the EN4R program is available on the AARNet web site

or contact

Ö~ ä[Áa^}
AARNet eResearch Öä^&f r
+61 ì ÁG J GGG
[g~ ä\[Éä^}@aarnet.edu.au](mailto:g~ ä[Éä^}@aarnet.edu.au)