# SCIENCE DMZ AND FRICTION-FREE NETWORKING

AARNet is developing services based on the Science DMZ architecture, in order to support data intensive research occurring at all institutions connected to the AARNet network.

- Brought to us by ESnet, the US Department of Energy research network, the basic premise is to divert large flows of data around the institutional firewall and through a secure yet highly tuned Data Transfer Node (DTN). This DTN performs data transfer on behalf of users. We call this 'friction-free networking'. http://fasterdata.es.net/science-dmz/

- The system improves performance for both 'big data' users and regular users of the network, as the heavy lifting of scientific networking no longer shares the same firewall as the rest of the network. This means that simpler security can be used, and that institutions don't require the same investment in high-end firewalls as is required to protect most end-users, so money can be saved, too.
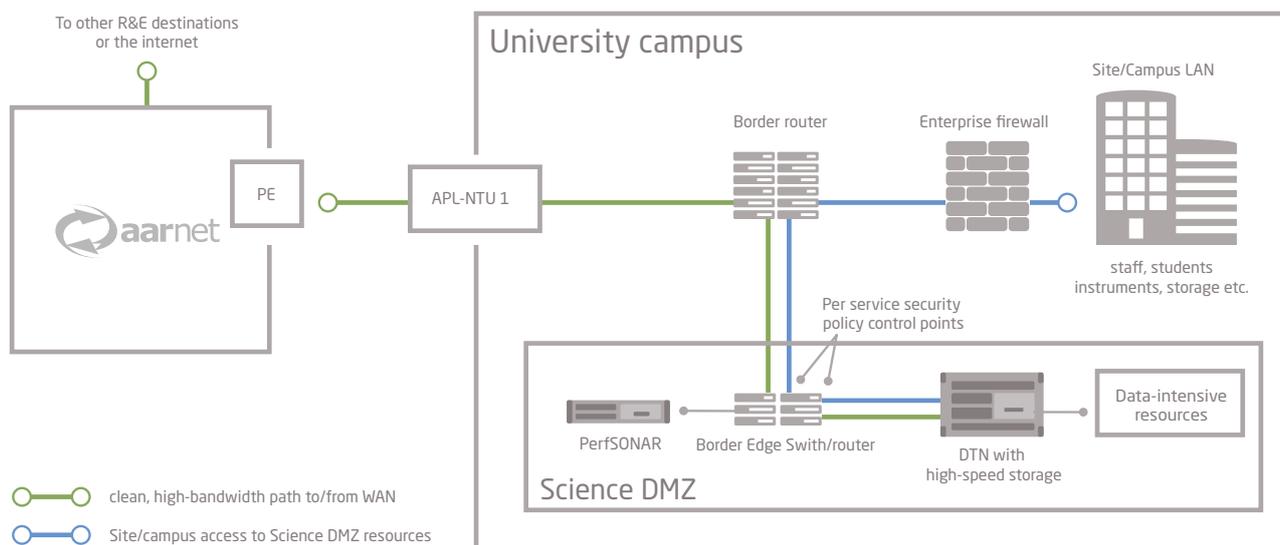
About AARNet

Australia's Academic and Research Network (AARNet) is the not-for-profit company that operates Australia's National Research and Education Network (NREN). Its shareholders are 38 Australian universities and the Commonwealth Scientific and Industrial Research Organisation (CSIRO).

AARNet provides high-capacity, leading-edge Internet and other advanced communications services to the nation's universities, health and other research organisations, as well as schools, vocational training providers and cultural institutions. AARNet serves over one million end users who access the network and services through shareholder and other customer institutions.

The role of AARNet's eResearch program is to assist researchers to realise the full potential of the Network.

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