

# BECOMING AN EDUROAM SERVICE PROVIDER

Prepared by Doug Farmer Product Portfolio Manager, Network & VAS AARNet 3Aug2018





### WHAT IS EDUROAM?

# eduroam

Educational Roaming (eduroam) is a wireless authentication service which allows staff and students from participating institutions to use wireless networks at cooperating locations in Australia and around the world, simply by using their institution's username and password.

The user's home institution (university, school etc) manages the username (eg 'student.name@rmit.edu.au') and password. They are known as the eduroam **'Identity Provider'** and need to be connected to AARNet.

Organisations offering wifi access to 'eduroam' via their own wifi and network infrastructure, are known as a **'Service Providers'** institutions. Service Providers don't need to be connected directly to AARNet but forward user authentication requests to AARNet, who in-turn directs those requests to the user's home institution (Identity Provider).

Typically, organisations are both an '**Identity Provider'** and a '**Service Provider'**. Increasingly though, eduroam is appearing across the world in public spaces, extending the boundaries of the traditional campus environments, improving the student experience and engagement with public spaces and facilities.

Becoming a Service Provider of eduroam promotes your strong links and engagement with the University and research sector and takes away the administrative burden of providing wifi guest access to students who become tomorrow's corporate and civic leaders.

AARNet Pty Ltd is the not-for-profit telecommunication company owned by the Australian higher education sector, which operates eduroam in Australia.

#### WHERE IS EDUROAM?

At tens of thousands of hotspots, across 89 countries: <u>https://www.eduroam.org/where/</u>

As well as university campuses, eduroam can be found at airports, in hospitals, public libraries, schools, cafes, on public transport and in public spaces.



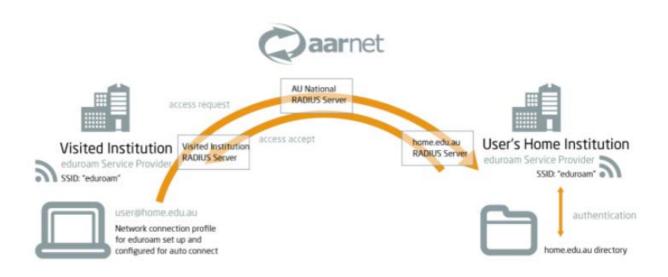
## HOW DO I BECOME AN EDUROAM SERVICE PROVIDER?

First, discuss your plans with an AARNet Customer Relations representative. https://www.aarnet.edu.au/contact-us

Normally organisations wishing to offer wifi access to eduroam users have partnered with a nearby University or group of Universities to establish the necessary infrastructure, support and other capabilities associated with operating eduroam. If you don't already have contacts with nearby Universities, an AARNet Customer Relations representative will be able to connect you.

Once the necessary arrangements are in place, AARNet will configure its systems to accept authentication requests from you.

University contacts can work with new Service Providers to configure their wireless infrastructure to broadcast the "eduroam" SSID, and to authenticate users associating with the "eduroam" network using a standard called "IEEE 802.1x", which involves wireless infrastructure passing an authentication request to a local "authentication server". The authentication server (technically speaking, a RADIUS server), forwards the authentication request to AARNet's national infrastructure which is responsible for forwarding onto the user's home institution.



#### ARE THERE ANY COSTS?

AARNet does not typically charge approved Service Providers, as there is a mutual benefit to both the education sector and organisations offering eduroam access via their network infrastructure. There may be indirect costs to Service Providers in operating their wifi infrastructure and carrying the Internet traffic, however, these can be alleviated if partnering with a nearby University.



# DO I NEED TO CONNECT/BACKHAUL TO AARNET?

No, not necessarily.

Authentication requests (communication between Service Provider and AARNet RADIUS servers) occur securely across the Internet, regardless of the internet provider used.

The actual Internet usage of the visiting eduroam user can be carried either by the Service Provider themselves through their existing internet service provider, or alternatively by "handing off" the eduroam internet traffic to a nearby partner University.

## WHAT ARE MY OBLIGATIONS AS A SERVICE PROVIDER?

As outlined above, Service Providers normally partner with Universities who can easily expand their existing eduroam support functions to cover many of the partnered Service Provider's obligations. There are however some issues a Service provider needs to be aware of.

Service Providers must not charge eduroam users.

eduroam users come with a high expectation of network performance and reliability. AARNet, at its sole discretion, can revoke the approval to use eduroam if the Service Provider's network is not of sufficient quality.

Service Providers should include eduroam content on a local webpage, providing information to visitors on local eduroam service characteristics, such as SSID and wireless encryption, map of eduroam coverage offered, network service provided, links to relevant acceptable use and privacy policies and a link to <a href="https://www.eduroam.edu.au/">https://www.eduroam.edu.au/</a>. AARNet and partner Universities can provide examples as a start for local variation. (Example: <a href="https://qudit.edu.au/services/eduroam-at-health-precincts/">https://qudit.edu.au/services/eduroam-at-health-precincts/</a>)

Service providers should orient their IT support staff about eduroam and provide a minimum level of support. The normal level of support Service Providers cover is checking their local wifi and authentication infrastructure is operating as it should, and then referring the customer back to their home University (Identity Provider) for further support.

Further more detailed technical notes and requirements are available on request. They will be provided as part of the implementation.

## FURTHER INFORMATION?

https://www.eduroam.edu.au

https://support.aarnet.edu.au