



# GARNET

## Ghanaian Academic and Research Network

### GARNET Identity Federation (GIF) eduroam Technology Profile

#### Terminology

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119 [1].

#### Introduction

This document is the GARNET Identity Federation (GIF) eduroam Technology Profile and was developed with reference to documentation on the eduroam website [2]. eduroam is an Authentication and Authorization Infrastructure (AAI) based on RADIUS or RadSEC.

#### Requirements

- All Identity Providers and Service Providers **MUST** comply with the European Confederation eduroam policy [3].
- Member institutions **MUST** provide network access in accordance with the eduroam Service Definition [4].
- Member institutions **MUST NOT** charge for network access using eduroam.
- Member institutions **MUST** be Service Providers – i.e. **MUST** provide 802.1x network access.
- Service Providers offering eduroam **MUST** provide WPA2.
- Member institutions **MUST** operate at least one eduroam compliant RADIUS server.
- GARNET **SHALL** operate at least one RADIUS server which proxies requests to member institutions' RADIUS servers based on realm names.
- The Radius REALM **MUST** be a string equal to a domain owned by the organization that owns the eduroam Identity Provider.
- Member institutions' eduroam compliant RADIUS servers **MUST** maintain a technical trust relationship with the GARNET operated national root RADIUS servers.
- Member institutions **SHOULD** provide and update statistics according to eduroam Service Definition [4].
- GARNET **MAY** present statistics on usage and accessibility on the site [eduroam.garnet.edu.gh](http://eduroam.garnet.edu.gh).
- Member institutions **MUST** aid all confederation members in solving problems and managing incidents involving roaming.

#### References

- [1] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, [RFC 2119](http://rfc2119.org), March 1997.
- [2] <https://www.eduroam.org/>
- [3] [https://www.eduroam.org/wp-content/uploads/2016/05/GN3-12-194\\_eduroam-policy-for-signing\\_ver24\\_1\\_18052012.pdf](https://www.eduroam.org/wp-content/uploads/2016/05/GN3-12-194_eduroam-policy-for-signing_ver24_1_18052012.pdf)
- [4] [https://www.eduroam.org/wp-content/uploads/2016/05/GN3-12-192\\_eduroam-policy-servicedefinition\\_ver28\\_26072012.pdf](https://www.eduroam.org/wp-content/uploads/2016/05/GN3-12-192_eduroam-policy-servicedefinition_ver28_26072012.pdf)