

| System     | Cost | Platform  | Pros   | Cons  | Why to choose  |
|------------|------|---|--|---|--|
| FreeRADIUS | Free | <ul style="list-style-type: none"> <li>* Linux (and similar e.g. Mac OS)</li> <li>* Packaged with most distributions</li> </ul> | <ul style="list-style-type: none"> <li>* Integrates with a wide range of authentication backends, including AD, LDAP, Kerberos, and multiple flavours of SQL.</li> <li>* Supports all EAP flavours commonly used for user authentication in govroam (EAP-PEAP, EAP-TLS, EAP-TTLS-PAP, EAP-TTLS-MSCHAPv2)</li> <li>* Flexible configuration language for defining complex policies.</li> <li>* Allows breakout into Perl or Python for exceptionally complex policies. Or integration with more escoteric data sources.</li> <li>* Extensible via plugin modules.</li> <li>* Supports RadSec natively.</li> <li>* Fast and efficient - a pair of RADIUS servers is usually sufficient for govroam deployments.</li> </ul> | <ul style="list-style-type: none"> <li>* Does not yet support DNS based Dynamic Discovery for RadSec (not yet relevant to govroam for ORPS deployments)</li> <li>* Can be difficult to configure due to the number of options available, especially for novice system administrators</li> </ul> | <ul style="list-style-type: none"> <li>* It's extreme flexibility and high performance means that FreeRADIUS is a good fit for most govroam sites, which is why it is the most deployed RADIUS servers within the eduroam federation.</li> <li>* The upshot of it's popularity is that there are many technical guides already published which take some of the edge of the sharp learning curve.</li> <li>* JISC can provide in-house consultancy.</li> </ul> |

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| Microsoft NPS | Free with Windows | * Windows | <ul style="list-style-type: none"> <li>* Windows GUI means no linux or scripting skills or experience needed</li> <li>* Works well with AD</li> <li>* Can be made to do the basics of the required job</li> </ul> | <ul style="list-style-type: none"> <li>* Filtering of RADIUS attributes not properly supported, but over-write workaround is satisfactory</li> <li>* Doesn't support Status Server</li> <li>* Doesn't support Operator-Name injection</li> <li>* Doesn't support Chargeable User Identity</li> <li>* GUI interface limits what you can configure</li> <li>* Everything is policy-based, which makes configuration based on logic somewhat difficult</li> <li>* Logging is minimal and inflexible</li> </ul> | <ul style="list-style-type: none"> <li>* If you're primarily a Windows shop you may be comfortable with the familiar interface and feel confident in selecting a fully supported product whilst accepting NPS's limitations.</li> </ul> |

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| OSC RADIATOR  | From<br>~£1,000 | * Linux<br>* Windows | <ul style="list-style-type: none"> <li>* Integrates with a wide range of authentication backends, including AD, LDAP, Kerberos, and multiple flavours of SQL.</li> <li>* Supports all EAP flavours commonly used for user authentication in govroam (EAP-PEAP, EAP-TLS, EAP-TTLS-PAP, EAP-TTLS-MSCHAPv2).</li> <li>* Flexible configuration language for defining complex policies.</li> <li>* Supports RadSec natively.</li> <li>* A pair of RADIUS servers is usually sufficient for govroam deployments.</li> <li>* Fully supported product - a range of support options are available</li> </ul> | <ul style="list-style-type: none"> <li>* Written in PERL so when your configuration get large and complex the server will get slower.</li> </ul> | <ul style="list-style-type: none"> <li>* It's extreme flexibility means that RADIATOR is a good fit for most govroam sites.</li> <li>* The upshot of it's popularity is that there are many technical guides already published which take some of the edge of the sharp learning curve and it is provided with a 'goodies' directory containing many recipes ready for use or to start off with.</li> <li>* If you need a flexible RADIUS server, and have the in house expertise to configure it, RADIATOR is a good choice</li> <li>* RADIATOR is written in PERL and can be run on Windows servers (with a prerequisite PERL interpreter installed) which would suit if you're primarily a Windows shop</li> </ul> |
| Cisco ACS/ISE | From<br>~£1,000 | * Appliance          |  | <ul style="list-style-type: none"> <li>* Doesn't support Status Server</li> </ul>  | <ul style="list-style-type: none"> <li>* An obvious choice if site already makes heavy use of Cisco wireless.</li> </ul>  |

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| Aruba Clearpass | From ~£4,000 | * Appliance<br>* VM   |  |  | * FreeRADIUS under the bonnet with a GUI front end<br>* An obvious choice if site already makes heavy use of Aruba wireless  |
| radsecproxy     | Free         | * Linux (and similar)<br>* Packaged with most distributions | * Very small foot print.<br>* Simple, flat configuration.<br>* Good performance.<br>* Supports all the requirements for govroam (e.g. attribute filtering, Operator-Name).<br>* Support RADSEC and non-RADSEC connections. | * Just a proxy - no ability to authenticate  | * If your platform cannot do good filtering or add attributes then if you use this at the border to talk to the NRPS you can leverage these abilities.<br>* Can be easily dropped in as a pure ORPS. |
| FreeRADIUS.net  | Free         | * Windows   | * Runs on Windows<br>* Has same features as FreeRADIUS   | * Very old (v 1.1.7 where FreeRADIUS is v 3.X.X)<br>* Designed to run on Windows XP<br>* Not suitable for production environment | * Not a good choice for a critical service   |

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