

Advisory: Use of Status-Server (Jul 2015)

Status-Server (RADIUS Code Type 12 packet) uses RFC 5997 - <http://www.ietf.org/rfc/rfc5997.txt> [1] - to deliver a method of one RADIUS server or client to know the status of an upstream or downstream server.

With a classic proxied RADIUS hierarchy, the RADIUS works in a 'fire and forget' UDP mode - if the server gets no response from the upstream/downstream server then it may mark it as dead/zombie and the next request from the NAS would be sent to another server in the proxy list...or the server may send it to the same remote RADIUS that did not respond until the NAS finally marks the RADIUS server as dead.

In either case, the NAS client does not know the real status of the server it talks to (it doesn't understand that the request may be having issues elsewhere) or the RADIUS server does not know. In this scenario it can be seen that a badly configured RADIUS end site (home IDP) with a local visitor from that site present at another site may induce an effect by failed logins with no responses that may mark National Proxies as dead within very few authentication attempts

Status-Server packets resolve this issue in that the RADIUS server, when it gets no response, can immediately fire off a Status-Server packet and see that the proxies are alive - just not responding to that request. This is far more efficient and minimizes 'zombie' proxy states. We have strongly advised using Status-Server from your RADIUS server to the National proxies, if your server supports such functionality, for several years - the National Proxies have been able to respond to such requests for many years.

However, new software on the National Proxies means that we can now reciprocate these requests - and use Status-Server to check the status of your RADIUS servers. On the eduroam UK support server there are new options in the Create/Update RPS section (define/update your ORPS) that allow you to turn on the Status-Server flag for your RADIUS server.

Be aware, this function is not yet enabled on the NRPS (still in testing/beta phase) BUT when it does come live **if your RADIUS server DOES NOT answer Status-Server queries then it WILL be marked as 100% dead and not be used(!!)**. Therefore ONLY enable this Status-Server function if you know and have verified that your RADIUS server can deal with status-server queries.

There will be some additional tools appearing on the support server that will enable verification of Status-Server capability - on the test page there will be a Status-Server check that will fire off Status-Server checks from each NRPS to each of your ORPS so you can check/verify that your configuration is correct (some RADIUS servers will need explicit configuration to allow Status-Server packets to be honored)

At this point in time, the following RADIUS servers work with Status-Server packets (latest

software noted due to bugs/issues with previous versions)

FreeRADIUS 2.2.8

FreeRADIUS 3.0.9

RADIATOR 4.15 (with all latest patches!)

radsecproxy 1.6.6

Source URL: <https://community.jisc.ac.uk/library/network-and-technology-service-docs/advisory-use-status-server-jul-2015>

Links

[1] <http://www.ietf.org/rfc/rfc5997.txt>