

What is a RADIUS Server? How does RADIUS Server work?

Radius Server is a background process that runs on UNIX or Windows servers. It allows you to maintain user profiles in the central database.

RADIUS is a protocol used for authorization and authentication. If you have a RADIUS server, you have full control over who can connect and who is not granted access to your network. This is applicable for all types of networks from wireless, VPN to direct and dial-up. Therefore, it is the intermediate layer in the communication between the client and the server.

What is a RADIUS server?

Remote Authentication Dial-In User Service (RADIUS) is a network protocol based on a client-server model running in the application layer. The RADIUS protocol uses a RADIUS server and RADIUS clients.

1. **The RADIUS client** (or Network Access Server) is a network device, such as a VPN concentrator, router, switch, used to authenticate users.
2. **Radius server** is a background process that runs on UNIX or Windows servers. It allows you to maintain user profiles in the central database.



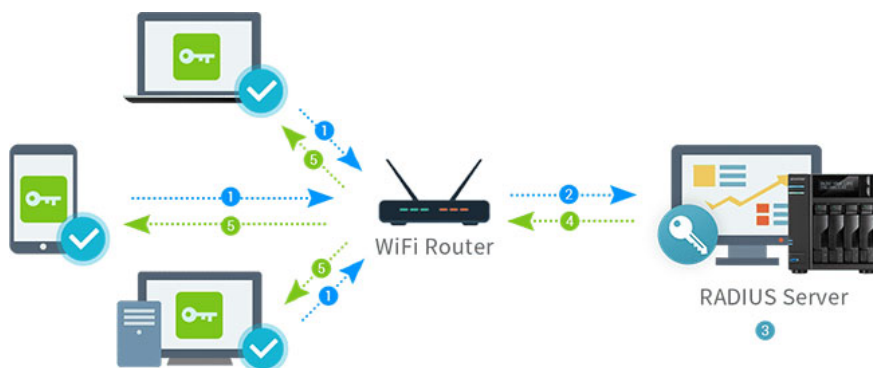
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All you need to know about the RADIUS server

In addition, the RADIUS protocol can be applied to the proxy configuration, according to which the proxy receives requests and for authentication, it is connected to the RADIUS server. The RADIUS server helps a company maintain user profiles in the central database, which can be accessed by all servers.

This helps to better manage security and set server administration policies. It also helps improve tracking of statistics and payment networks. In fact, this has become an industry standard and a lot of different companies are gradually adapting to these networking products.

Implementing RADIUS server



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The process begins with the user sending a request to the server to access. The server received the request and authentication began. The client can send a request from a browser-based HTTPS connection or from a mobile VPN. In the first case, the connection takes place via the port, then through IPSec. The server takes the user name and password from the user, then creates an access request message, then sends it to the RADIUS server. The password is encrypted in the request for access and also has the RADIUS access secret code so that it will not be lost during the transfer.

The RADIUS server receives the request and checks whether it is coming from a known server. Otherwise, the request will be rejected immediately and in case of doubt, the server may be blocked from the next request. If it is a known server, the RADIUS server will check the shared secret code. The server also considers the authentication method request. Authentication method must be within the allowed options.

If the authentication method is within the allowed range, the username and password will be accessed. The decryption is done and the login information is matched to the database. After that, a lot of user information and data is fetched to match the access policy set on the server. If everything is compatible and appropriate, the RADIUS server will send feedback. If login credentials or policy do not match, access is denied.

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