



Purpose: How to configure the Mac Authentication feature.

With the release of x.4.2, the Nomadix Service Engine allows authentication with a Radius server using the MAC address as the username and password. The Radius server must have a User Profile matching the MAC address format specified in the settings below.

MAC Authentication should be used for those devices requiring authentication without a username and password, such as VoIP phones.

These settings can be accessed under the following menus:

- **WMI Configuration**
 - Go to Configuration->MAC authentication
- **CLI Configuration**
 - Go to configuration->macauth
- **SNMP Configuration**
 - Go to nse->aaa.aaaMacAuth (enterprises.3309.1.x.2.28) for MAC-based Authentication configuration branch

A screenshot of a web-based configuration interface for "MAC Authentication Settings". The page has a light green header with the title "MAC Authentication Settings" and a sub-header "Authenticate with RADIUS using subscriber MAC address". The main content area contains several configuration fields: "MAC Authentication" is a checkbox labeled "Enabled" with an information icon; "Retry Delay" is a text input field with "10" and "(seconds)" next to it; "Retry Limit" is a text input field with "6" and "(0 for 'unlimited')"; "MAC Address Format" has three radio button options: "aa-bb-cc-dd-ee-ff" (selected), "aa:bb:cc:dd:ee:ff", and "aabbccddeeff"; "Case of Hex-Alpha Characters" has two radio button options: "Lowercase" (selected) and "Uppercase"; "RADIUS Service Profile to use" is a dropdown menu with "(select one)" and a downward arrow. At the bottom, there are two buttons: "Save" with a floppy disk icon and "Restore" with a circular arrow icon.



MAC Authentication Checkbox

This checkbox enables/disables the MAC-based Authentication functionality. It is disabled by default.

Retry Delay

This is the time in seconds to wait after an unsuccessful MAC authentication attempt to initiate another request. The minimum and default value is 10 seconds.

Retry Limit

This number determines how many times to attempt the authentication. If the device does not authenticate after this limit, the NSE will not try again.

MAC Address Format

Specifies the format in which the subscriber's MAC address will be expressed in the RADIUS username and password attributes. The RADIUS server must use the same format. Default setting is aa-bb-cc-dd-ee-ff.

MAC Address Hex-Alpha Case

Specifies, in the MAC addresses in RADIUS username and password attributes, whether the hex-alpha characters A-F will be uppercase or lower case. The default setting is lowercase.

RADIUS Service Profile to use

Specifies the RADIUS Service Profile (and therefore which RADIUS servers) to use for MAC-based Authentication purposes.

NOTE: Enabling MAC Authentication will cause each MAC address to send an authentication request. Unless "Later login supersedes previous" is checked under the Configuration -> Radius Client settings, the first access-accept from the Radius server will be the authentication method used.