

## RADIUS IETF Attributes Supported by the AAA Service Framework

Table 1 describes the RADIUS IETF attributes that the JUNOS AAA Service Framework supports.



**NOTE:** A “Yes” entry in the Dynamic CoA Support column indicates that the attribute can be dynamically configured by Access-Accept messages and dynamically modified by CoA-Request messages.

**Table 1: Supported RADIUS IETF Attributes**

| Attribute Number | Attribute Name    | Description   | Dynamic CoA Support |
|------------------|-------------------|---|---------------------|
| 1                | User-Name         | <ul style="list-style-type: none"><li>Name of user to be authenticated</li><li>Configurable username override</li></ul>   | No                  |
| 2                | User-Password     | <ul style="list-style-type: none"><li>Password of user to be authenticated by Password Authentication Protocol (PAP)</li><li>Configurable password override</li></ul>             | No                  |
| 4                | NAS-IP-Address    | IP address of the network access server (NAS) that is requesting authentication of the user   | No                  |
| 5                | NAS-Port          | Physical port number of the NAS that is authenticating the user   | No                  |
| 6                | Service-Type      | Type of service the user has requested or the type of service to be provided  | No                  |
| 8                | Framed-IP-Address | <ul style="list-style-type: none"><li>IP address to be configured for the user</li><li>0.0.0.0 or absence is interpreted as 255.255.255.254</li></ul>                             | No                  |
| 9                | Framed-IP-Netmask | <ul style="list-style-type: none"><li>IP network to be configured for the user when the user is a router or switch to a network</li><li>Absence implies 255.255.255.255</li></ul> | No                  |
| 11               | Filter-ID         | <ul style="list-style-type: none"><li>Name of the filter list for the user</li><li>Interpreted as input policy name</li></ul>   | Yes                 |
| 18               | Reply-Message     | <ul style="list-style-type: none"><li>Text that may be displayed to the user</li><li>Only the first instance of this attribute is used</li></ul>                                  | No                  |

**Table 1: Supported RADIUS IETF Attributes** (continued)

| Attribute Number | Attribute Name     | Description   | Dynamic CoA Support |
|------------------|--------------------|---|---------------------|
| 22               | Framed-Route       | String that provides routing information to be configured for the user on the NAS; in the format:<br><br><addr>[/<maskLen>] [<nextHop> [<cost>]]<br>[tag <tagValue>] [distance <distValue>]   | Yes                 |
| 25               | Class              | An arbitrary value that the NAS includes in all accounting packets for the user if supplied by the RADIUS server  | No                  |
| 27               | Session-Timeout    | Maximum number of consecutive seconds of service to be provided to the user before termination of the session   | No                  |
| 31               | Calling-Station-ID | Indicates that the NAS can send the phone number from which the call originated   | No                  |
| 32               | NAS-Identifier     | Identifies the NAS originating the request  | No                  |
| 40               | Acct-Status-Type   | Indicates whether this Accounting-Request marks the beginning of the user service (Start), the end (Stop), or the interim (Interim-Update)  | No                  |
| 41               | Acct-Delay-Time    | Indicates how many seconds the client has been trying to send a particular record   | No                  |
| 42               | Acct-Input-Octets  | Indicates how many octets have been received from the port during the time this service has been provided   | No                  |
| 43               | Acct-Output-Octets | Indicates how many octets have been sent to the port during the time this service has been provided   | No                  |
| 44               | Acct-Session-ID    | Unique accounting identifier that makes it easy to match start and stop records in a log file. The identifier can be in one of the following formats: <ul style="list-style-type: none"> <li>■ decimal—For example, 435264</li> <li>■ description—In the generic format, jnpr<br/><i>interface-specifier:subscriber-session-id</i>;<br/>For example, jnpr fastEthernet<br/>3/2.6:1010101010101</li> </ul> | No                  |
| 45               | Acct-Authentic     | Indicates how the user was authenticated: whether by RADIUS, the NAS itself, or another remote authentication protocol  | No                  |

**Table 1: Supported RADIUS IETF Attributes** (continued)

| Attribute Number | Attribute Name       | Description  | Dynamic CoA Support |
|------------------|----------------------|--|---------------------|
| 46               | Acct-Session-Time    | Indicates how long in seconds that the user has received service   | No                  |
| 47               | Acct-Input-Packets   | Indicates how many packets have been received from the port during the time this service has been provided to a framed user  | No                  |
| 48               | Acct-Output-Packets  | Indicates how many packets have been sent to the port in the course of delivering this service to a framed user  | No                  |
| 49               | Acct-Terminate-Cause | <p>Contains the reason the service (a PPP session) was terminated. The service can be terminated for the following reasons:</p> <ul style="list-style-type: none"> <li>■ User Request (1)—User initiated the disconnect (log out)</li> <li>■ Idle Timeout (4)—Idle timer has expired</li> <li>■ Session Timeout (5)—Client reached the maximum continuous time allowed on the service or session</li> <li>■ Admin Reset (6)—System administrator terminated the session</li> <li>■ Port Error (8)—PVC failed; no hardware or no interface</li> <li>■ NAS Error (9)—Negotiation failures, connection failures, or address lease expiration</li> <li>■ NAS Request (10)—PPP challenge timeout, PPP request timeout, tunnel establishment failure, PPP bundle failure, IP address lease expiration, PPP keep-alive failure, Tunnel disconnect, or an unaccounted-for error</li> </ul> | No                  |
| 52               | Acct-Input-Gigawords | Indicates how many times the Acct-Input-Octets counter has wrapped around $2^{32}$ during the time this service has been provided. Can be present in Accounting-Request records only where the Acct-Status-Type is set to Stop or Interim-Update   | No                  |

**Table 1: Supported RADIUS IETF Attributes** (continued)

| Attribute Number | Attribute Name        | Description   | Dynamic CoA Support |
|------------------|-----------------------|---|---------------------|
| 53               | Acct-Output-Gigawords | Indicates how many times the Acct-Output-Octets counter has wrapped around $2^{32}$ in the course of delivering this service. Can be present in Accounting-Request records only where the Acct-Status-Type is set to Stop or Interim-Update   | No                  |
| 55               | Event-Timestamp       | Records the time that this event occurred on the NAS, in seconds, since January 1, 1970 00:00 UTC   | No                  |
| 61               | NAS-Port-Type         | Indicates the type of physical port the NAS is using to authenticate the user   | No                  |
| 85               | Acct-Interim-Interval | <p>Number of seconds between each interim accounting update for this session</p> <p>The router uses the following guidelines for interim accounting:</p> <ul style="list-style-type: none"> <li>■ Attribute value is within the acceptable range (600 to 86,400 seconds)—Accounting is updated at the specified interval</li> <li>■ Attribute value of 0—No RADIUS accounting is performed</li> <li>■ Attribute value is less than the minimum acceptable value—Accounting is updated at the minimum interval (600 seconds)</li> <li>■ Attribute value is greater than the maximum acceptable value—Accounting is updated at the maximum interval (86,400 seconds)</li> </ul> | No                  |
| 87               | NAS-Port-ID           | Text string that identifies the physical interface of the NAS that is authenticating the user   | No                  |
| 88               | Framed-Pool           | Name of an assigned address pool to use to assign an address for the user   | No                  |
| 95               | NAS-IPv6-Address      | Address of the NAS that is requesting authentication of the user  | No                  |
| 96               | Framed-Interface-ID   | Interface identifier that is configured for the user  | No                  |
| 97               | Framed-IPv6-Prefix    | IPv6 prefix that is configured for the user   | No                  |

**Table 1: Supported RADIUS IETF Attributes** *(continued)*

| <b>Attribute Number</b> | <b>Attribute Name</b> | <b>Description</b>   | <b>Dynamic CoA Support</b> |
|-------------------------|-----------------------|--|----------------------------|
| 98                      | Login-IPv6-Host       | System the user connects to when the Login-Service attribute is included | No                         |
| 99                      | Framed-IPv6-Route     | IPv6 routing information that is configured for the user.                | Yes                        |
| 100                     | Framed-IPv6-Pool      | Name of assigned pool used to assign an IPv6 prefix for the user         | No                         |
| 123                     | Delegated-IPv6-Prefix | Prefix that is delegated to the user                                     | No                         |

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