

Interaction with RADIUS for ICR

You can include an ICR-Partition-Id vendor-specific attribute (VSA) in the following RADIUS messages:

- Access-Request
- Acct-Start
- Acct-Stop
- Interim-Acct (if Acct-Stop messages are specified)
- Partition-Accounting-On
- Partition-Accounting-Off



NOTE: For more information about the ICR partition accounting messages, see the *Configuring RADIUS Attributes* chapter in the *JUNOS Broadband Access Configuration Guide*.

Use the ICR-Partition-Id VSA to determine the ICR partition on which subscribers are logged in. You can configure the same ICR-Partition-Id string for an active ICR partition and its corresponding backup partition.

To configure inclusion of ICR-Partition-Id in RADIUS Access-Request, Acct-Start, and Acct-Stop messages, you can use the ICR-Partition-Id attribute in the **radius include** command. When included in Acct-Stop messages, the attributes are also included in Interim-Acct messages. If you enabled ICR partition accounting and accounting servers are not configured in that partition, it is as if ICR partition accounting is disabled.

In addition to including the ICR-Partition-Id VSA in RADIUS Access-Request, Acct-Start, Acct-Stop, and Interim-Acct messages, the router also sends the Partition-Accounting-On and Partition-Accounting-Off messages:

Both Partition-Accounting messages include the ICR-Partition-Id VSA. Also, both these messages are sent to the RADIUS accounting server configured on the virtual router where the ICR partition is configured or the virtual router on which the ICR control interface is set up.

You can optionally configure duplicate or broadcast AAA accounting on a virtual router, which sends the accounting information to additional virtual router simultaneously, so that the Partition-Accounting-On and Partition-Accounting-Off messages can also be sent to the duplicate and broadcast virtual routers.

ICR Partition Accounting Overview

To enable or disable sending of the ICR Partition-Accounting-On or Partition-Accounting-Off messages to the RADIUS servers, you can now use the **radius icr-partition-accounting** command. If you enabled ICR partition accounting on a virtual router, subscribers are allowed to log in to that partition only after the response

for the corresponding Partition-Accounting-On message is received from the RADIUS server. As a result, the time that it takes to receive a response from the RADIUS server might increase the time it takes for subscribers to log in. Also, when an ICR partition transitions from the master to backup state, the Partition-Accounting-Off message is sent to the RADIUS server only after the router receives the response for the Acct-Stop messages for all the subscribers logged out in that partition.

The transition of the ICR partition states from master to backup and backup to master can occur because of chassis failure, an administrative switchover, or an interface or line module reset action. The following scenarios describe how ICR partition accounting messages are processed and subscriber logging is handled:

- In the event of a complete chassis failure, RADIUS does not interact with the failing B-RAS application on the router. In such a scenario, when the new master partition takes over, the Partition-Accounting-On message is sent from the new master. After the response for the Partition-Accounting-On message is received from the new master partition, subscribers are allowed to log in to the master. When you remove certain VLAN or S-VLAN IDs from an ICR partition, the corresponding subscribers in that partition are removed and forced to log out from the chassis. This action causes the Acct-Stop messages to be sent to RADIUS.
- If ICR partition accounting is enabled and an administrative switchover forces subscribers in a particular ICR partition to logged out, the Partition-Accounting-Off message is sent from the failing B-RAS application on the router only after Acct-Stop responses are received for all the logged out subscribers.
- If ICR partition accounting is enabled, and the interface or the line module that is configured with the ICR partition resets, the Partition-Accounting-Off message is sent from the failing B-RAS application on the router after Acct-Stop responses are received for all subscribers in that partition.

Related Topics

- Using RADIUS to Manage Subscribers Logging In to ICR Partitions
- radius include
- radius icr-partition-accounting
- show radius icr-partition-accounting
- *Configuring RADIUS Attributes in the JUNOS Broadband Access Configuration Guide*

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