



Handling Flow-Information AVPs

This chapter describes the following topics:

- [Feature Summary and Revision History, on page 1](#)
- [Feature Description, on page 2](#)
- [How It Works, on page 2](#)
- [Monitoring and Troubleshooting, on page 2](#)

Feature Summary and Revision History

Summary Data

Applicable Product(s) or Functional Area	<ul style="list-style-type: none"> • GGSN • P-GW • SAEGW
Applicable Platform(s)	ASR 5500
Feature Default	Enabled - Always-on
Related Changes in This Release	Not Applicable
Related Documentation	<i>ECS Administration Guide</i>

Revision History



Important Revision history details are not provided for features introduced before releases 21.2 and N5.5.

Revision Details	Release
ECS supports up to 16 Flow-Information AVPs and remaining, if any, are ignored.	21.4
First introduced.	Pre 21.2

Feature Description

PCRF can send any number of Flow-Information AVPs in CC-Answer (CCA) and Re-Auth-Request (RAR) messages. Currently, the ECS supports processing of eight Flow-Information AVPs and remaining, if any, are ignored. With this enhancement, ECS supports up to 16 Flow-Information AVPs and remaining, if any, are ignored.

How It Works

This section provides a brief overview of how this feature works.

- P-GW initiates Create Bearer Request/Update Bearer Request with TFTs for all 16 Flow-Information AVPs.
- P-GW initiates multiple Create Bearer Request/Update Bearer Request if TFTs for all 16 Flow-Information AVPs cannot be accommodated in a single message.
- Rule match for dynamic rule to consider up to 16 Flow-Information AVPs for traffic classification.
- If more than 16 Flow-Information AVPs are received, only 16 AVPs are processed and remaining AVPs are ignored.
- P-GW checkpoints all 16 Flow-Information AVPs received from PCRF in CCA and RAR messages to standby chassis if standby chassis is on same release.
- P-GW recovers all 16 Flow-Information AVPs after Session Manager recovery.
- CRR/checkpoint size does not increase if P-GW receives less than 8 Flow-Information AVPs.
- P-GW checkpoints up to 8 Flow-Information AVPs to standby chassis if standby chassis is on older release, and if it receives more than 8 Flow-Information AVPs from PCRF in CCA and RAR messages.
- ICSR upgrade from N-1 to N, and ICSR downgrade from N to N-1 release works as expected.

Monitoring and Troubleshooting

The output of the following CLI commands has been modified to display 16 Flow-Information AVPs:

- **show active-charging sessions full all**
- **show subscribers pgw-only full all**