

Gy Failure Handling Enhancement

- Feature Summary and Revision History, on page 1
- Feature Description, on page 2
- How It Works, on page 2
- Configuring Gy Failure Handling, on page 3
- Monitoring and Troubleshooting the Gy Failure Handling, on page 3

Feature Summary and Revision History

Summary Data

Applicable Product(s) or Functional Area	• P-GW • SAEGW
Applicable Platform(s)	ASR 5500
Feature Default	Disabled - Configuration Required
Related Changes in This Release	Not Applicable
Related Documentation	• *P-GW Administration Guide* • *SAEGW Administration Guide*

Revision History

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

Revision Details	Release
A new option to continue the session, but drop the traffic, is introduced in the FH-template that is associated with a Credit Control Group. An existing CLI command is enhanced to enable the feature.	21.3
First introduced.	Pre 21.2

Feature Description

In releases prior to 21.3, the Gy failure-handling-template (FH-template) had no option to block the chargeable traffic while retaining the PDN session.

In 21.3 and later releases, "continue discard-traffic" option has been added to Gy failure-handling-template to block the chargeable traffic while retaining the PDN session.

How It Works

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

- A new option to continue the session, but drop the traffic, is introduced in the FH-template that is associated with a Credit Control Group. An existing CLI command is enhanced to enable the feature.
- When the "continue discard-traffic" FH action is enforced, all traffic is blocked for the given DCCA session. The DCCA session refers to the PDN (and all bearers therein) or to a specific bearer. The matching bearers a DCCA session corresponds to, continues as it is for FH action "continue". Only the traffic that requires online charging is dropped.
- The "continue discard-traffic" status remains enforced unless a Rule modification or installation is received from the PCRF for a pure dynamic rule. The online AVP (online = 1) is sent eventually from the PCRF which resumes the Gy session for the given bearer (sub session). This behavior is based on the "offline-session re-enable" CLI that is available in the credit-control-group configuration mode.
- All traffic that requires online-charging is dropped.
- The charging action is identified and only if the charging action requires "online" charging, the corresponding drop action is taken.
- The "continue discard-traffic" status on a subscriber remains as is post recovery. Traffic is blocked after recovery as long as Gx does not re-enable the Gy session.



Note

- The **Gy Failure Handling Enhancement** feature works along with the *OCS Failure Reporting to PCRF* (introduced in Release 21.0) and the *Enhancement to OCS Failure Reporting for Gy* (introduced in Release 21.2) features. Refer to the respective *Release Change Reference* for additional information.
- When the CCFH/FH-Template is configured with Continue action (or this new FH-Template “continue-discard”) and the corresponding action is being taken, then the reporting to the PCRF happens as per the *OCS Failure Reporting to PCRF* feature.

Configuring Gy Failure Handling

Use the following commands under the Diameter Failure Handling Template Configuration Mode to discard data traffic while retaining the subscriber session.

```
configure
  failure-handling-template template_name
    msg-type { credit-control-initial | credit-control-terminate |
credit-control-update } failure-type any action continue discard-traffic
    end
```

Notes:

- Use the **msg-type { credit-control-initial | credit-control-terminate | credit-control-update } failure-type any action continue discard-traffic** CLI command to specify the behavior if there is a communication failure with the prepaid server. If there are different failure handling configurations present within the template for the same message type, the action is applied as per the latest error encountered.
- The enhancement of "discard-traffic" is added to action "continue". This blocks data traffic while retaining the subscriber session.
- If previously configured, use the **no msg-type { credit-control-initial | credit-control-terminate | credit-control-update } failure-type any** CLI command to remove the configuration associated with the failure handling template.
- The "discard-traffic" keyword can only be configured along with "continue" action, and it takes affect when the respective failure occurs.
- This CLI option is disabled by default. The "discard-traffic" keyword needs explicit configuration if the respective discard action is desired.

Monitoring and Troubleshooting the Gy Failure Handling

This section provides information regarding monitoring and troubleshooting the feature.

Gy Failure Handling Show Command(s) and/or Outputs

This section provides information regarding show commands and/or their outputs in support of the feature.

show active-charging credit-control statistics

The output of this show command has been enhanced to display the following new field in support of this feature:

- Action-Drop:

Following is a partial sample output:

```
Failure Handling Stats:
      Action-Terminated:       0            Action-Continue:         0
      Offline Active Sessions: 0            Action-Drop:             0
```