



# Diameter Result Code Specific Counters on Gy Interface

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## Feature Summary and Revision History

### Summary Data

Applicable Product(s) or Functional Area	SaMOG
Applicable Platform(s)	<ul style="list-style-type: none"> <li>• ASR 5500</li> <li>• VPC-DI</li> <li>• VPC-SI</li> </ul>
Feature Default	Enabled - Always-on
Related Changes in This Release	Not applicable
Related Documentation	<ul style="list-style-type: none"> <li>• <i>SaMOG Administration Guide</i></li> <li>• <i>Statistics and Counters Reference, StarOS Release Guide</i></li> </ul>

### Revision History

Revision Details	Release
This release supports additional Diameter error code counters for Transient Failures [4XXX] and Permanent Failures [5XXX] on SaMOG (web-auth) service through P-GW LBO module.	21.21

## Feature Description

SaMOG supports Diameter result code counters for all failure transactions and diameter interfaces on SaMOG (Web-auth) services through P-GW Local Breakout (LBO) module on various StarOS platforms ASR5500/ASR5700.

The following set of result code-specific counters is supported for the responses received from the OCS (Online Charging System), on Gy interface. DCCA (Diameter Credit Control Application) is the protocol used on the Gy interface.

*Table 1: Result Code Specific Counters*

Error Category	Result Code	Result Code Value
Transient Failures [4XXX]	DIAMETER_END_USER_SERVICE_DENIED	4010
Permanent Failures [5XXX]	DIAMETER_RATING_FAILED	5031

## Monitoring and Troubleshooting

### Show Commands and Outputs

#### show active-charging credit-control statistics

```
show active-charging credit-control statistics {group <group_name> | {server <server_name> | ip-address <ip-address>}}
```

This output of this command displays the result code-specific counters for initial and update CCA responses, in addition to aggregate of CCA response messages.

*Table 2: Result Code Specific Counters*

Field	Description
<b>CCA Initial Message Stats</b>	
Result Code 4012	This counter shows the number of responses received for CCA-I messages with a Diameter Result-Code=4012.
Result Code 5031	This counter shows the number of responses received for CCA-I messages with a Diameter Result-Code=5031.
<b>CCA Update Message Stats</b>	
Result Code 4012	This counter shows the number of responses received for CCA-U messages with a Diameter Result-Code=4012.
Result Code 5031	This counter shows the number of responses received for CCA-U message with a Diameter Result-Code=5031.

Field	Description
<b>CCA Result Code 4xxx Stats</b>	
Result Code 4010	This counter shows the number of responses received for CCA messages with a Diameter Result-Code=4010.
<b>CCA Result Code 5xxx Stats</b>	
Result Code 5031	This counter shows the number of responses received for CCA messages with a Diameter Result-Code = 5031.

## Bulk Statistics

### System Schema Statistics

The following bulk statistics in the SaMOG schema support this feature.

*Table 3: System-level Schema Statistics*

Reason No.	Description	Data Type
<b>Init:</b>		
cca-init-4010-rc	<p><b>Name:</b> DIAMETER_END_USER_SERVICE_DENIED (4010)</p> <p><b>Description:</b> The total number of responses received for diameter end-user service denied messages.</p> <p><b>Type:</b> Counter</p>	String
cca-init-5031-rc	<p><b>Name:</b> DIAMETER_RATING_FAILED (5031)</p> <p><b>Description:</b> The total number of responses received for diameter rating failed messages.</p> <p><b>Type:</b> Counter</p>	String
<b>Update:</b>		
cca-updt-4010-rc	<p><b>Name:</b> DIAMETER_END_USER_SERVICE_DENIED (4010)</p> <p><b>Description:</b> The total number of responses received for diameter end-user service denied messages</p> <p><b>Type:</b> Counter</p>	String

Reason No.	Description	Data Type
cca-updt-5031-rc	<p><b>Name:</b>DIAMETER_RATING_FAILED (5031)</p> <p><b>Description:</b> The total number of responses received for diameter rating failed messages.</p> <p><b>Type:</b> Counter</p>	String
<b>Aggregate</b>		
cca-4010-rc	<p><b>Name:</b>DIAMETER_END_USER_SERVICE_DENIED (4010)</p> <p><b>Description:</b> The aggregate number of responses received for diameter end-user service denied messages.</p> <p><b>Type: Counter</b></p>	String
cca-5031-rc	<p><b>Name:</b> DIAMETER_RATING_FAILED (5031)</p> <p><b>Description:</b> The aggregate number of responses received for diameter rating failed messages.</p> <p><b>Type: Counter</b></p>	String