

Handling Final Unit Indication with MSCC Result Code 4999

Table 1: Feature History

Feature Name	Release Information	Description
Map FUI with MSCC result Code 4999	2025.01.0	CuPS Control Plane supports Final Unit Indication (FUI) with MSCC Result Code 4999, by mapping the MSCC Result Code 4999 to 2001 (DIAMETER_SUCCESS) when the Final Unit Indication AVP is received. This feature benefits customers by allowing session continuation and applying the FUI action specified in the AVP. **Command Introduced**: A new CLI command **map-mscc-rc-4999-to-2001** is introduced to map the MSCC Result Code 4999 to 2001 (DIAMETER_SUCCESS). **Default Setting**: Disabled-Configuration Required to Enable.

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Overview

In the CUPS Control Plane, when the Final Unit Indication (FUI) AVP is received with the Multiple Services Credit Control (MSCC) Result Code 4999, the specified action mentioned in FUI AVP, either redirect or terminate, should be applied.

How the FUI with Result Code Works

When the Control Plane receives a Credit Control Initial/Update Response with MSCC result code 4999:

- By default, the session is terminated with a Termination-Cause of DIAMETER_BAD_ANSWER (3).
- With the FUI with Result Code feature, the MSCC result code 4999 can be mapped to 2001 (DIAMETER_SUCCESS) through the **map-mscc-rc-4999-to-2001** CLI command, enabling the system to follow the Final Unit Indication AVP's action.

Configuration for Handling FUI with MSCC Result Code 4999

Handling the Final Unit Indication (FUI) with MSCC Result Code 4999 requires the operator to configure the parameters to apply the specified action mentioned in FUI, either redirect or terminate.

These are the steps to map the MSCC Result Code 4999 to 2001 (DIAMETER_SUCCESS) when the Final Unit Indication AVP is received:

Procedure

Step 1 Login to the Credit Control Configuration mode.

```
Exec > ACS Configuration > Credit Control Configuration.
```

Step 2 Define the active-charging service name using the command **active-charging service** *name*

Example

```
[local]qvpc-si# configure
[local]qvpc-si(config)# active-charging service ACS
```

Step 3 Define the credit-control group name using the command **diameter credit-control group** *cc-name*

Example

```
[local]qvpc-si# configure
[local]qvpc-si(config)# active-charging service  ACS
[local]qvpc-si(config-acs) # diameter credit-control group cc-name
```

Step 4 Enable the diameter credit control application to map the MSCC level result code 4999 to 2001.

Example:

```
[local]qvpc-si# configure
[local]qvpc-si(config)# active-charging service ACS
[local]qvpc-si(config-acs) # diameter credit-control group
[local]qvpc-si(config-dcca)# diameter map-mscc-rc-4999-to-2001
```

Note
[no] diameter map-mscc-rc-4999-to-2001 is set by default under the credit control group configuration, you need to enable if required.

Step 5 Exit the configuration mode using the command **end**.

Example:

```
[local]qvpc-si# configure
[local]qvpc-si(config)# active-charging service ACS
[local]qvpc-si(config-acs) # diameter credit-control group
[local]qvpc-si(config-dcca)# diameter map-mscc-rc-4999-to-2001
[ingress]qvpc-si(config-acs)# end
[local]qvpc-si#
```

Monitoring and Troubleshooting

This section describes the information used for monitoring and troubleshooting this feature.

Show Commands and Outputs

This section discusses the show commands used in this feature.

show active-charging service all

The show command **show active-charging service all** displays either enabled or disabled parameter of mapping FUI with MSCC Result Code 4999 to 2001.

```
local]qvpc-si# show active-charging service all

Service name: acs

Credit Control:
Group : default

Mode : diameter
APN-name-to-be-included: gn
Trigger-Type : N/A
Event-Trigger-Type : N/A

Failure-Handling:
Initial-Request : terminate
Update-Request : retry-and-terminate
Terminate-Request: retry-and-terminate

Server Unreachable Failure-Handling:
Initial-Request : N/A
Update-Request : N/A
```

```
Diameter:
Endpoint : st16.cc.starentnetworks.com
Endpoint-Realm : N/A
Dictionary : dcca-custom8
Session-Failover: Supported
Pending-Timeout : 100 (deciseconds)
Peer-Select :
Peer : 192.60.6.20
Realm : N/A
Secondary-Peer : N/A
Realm : N/A
HDD : Disabled

Quota:
Request-Trigger : include-packet-causing-trigger
Holding-Time : N/A
Validity-Time : N/A
Time-Threshold : N/A
Units-Threshold : N/A
Volume-Threshold : N/A

Pending-Traffic-Treatment:
trigger : drop
forced-reauth : drop
noquota : buffer
quota-exhausted : buffer
validity-expired : drop

gy-rf-trigger-type N/A

Pending-CCAU:
allow-on-rar-peer-switch : Disabled

bind-realm-from-rar : Disabled

map-mscc-rc-4999-to-2001 : Enabled/Disabled
```