Resuelva problemas la degradación 4G ASR KPI debido a un aumento en el motivo de desconexión MME-HS-usuario-desconocido

Contenido

Introducción

Este documento describe cómo resolver problemas el problema que ocurre cuando ocurre la degradación del indicador de rendimiento clave del índice de éxito de la fijación 4G (ASR) (KPI) cuando se aumenta el motivo de desconexión MME-HS-usuario-**desconocido**.

Prerrequisitos

Requisitos

Cisco recomienda que tenga conocimiento sobre estos temas:

- Conocimiento de la dotación física de 5000/5500
- StarOS

Componentes Utilizados

Este documento no tiene restricciones específicas en cuanto a versiones de software y de hardware.

La información que contiene este documento se creó a partir de los dispositivos en un ambiente de laboratorio específico.
Todos los dispositivos que se utilizan en este documento se pusieron en funcionamiento con una configuración verificada (predeterminada). Si tiene una red en vivo, asegúrese de entender el posible impacto de cualquier comando.

Abreviaturas

ASR	Asocie el índice de éxito
KPI	Indicador de rendimiento clave
AIRE	Petición de la información de autenticación
AYA	Respuesta de la información de autenticación
CER	Petición del intercambio de capacidad
EL CEA	Respuesta del intercambio de capacidad
MME	Entidad de administración de la movilidad
HS	Servidor del suscriptor casero
DPC	Indicador luminoso LED amarillo de la placa mue gravedad menor de proceso de datos
RFC	Request For Comments
AVP	Par de valores de atributos

Problema

El proveedor de servicio señaló que la degradación 4G ASR en un MME y el motivo de desconexión “MME-HS-usuario-desconocido” fue aumentada.

el motivo de desconexión del "mme-HS-usuario-unknown(375)" describe el número total de sesiones desconectadas porque el usuario de MME HSS es desconocido.

Un rastro del error que fue capturado señaló que los HS rechazaban la autenticación como código de resultado DIAMETER_MISSING_AVP (5005) en el mensaje de AYA.

MME “DIAMETER_MISSING_AVP constantemente conseguido (el 5005)" de los HS y de éste es cómo el mensaje de AYA del error parece:

```
INBOUND>>>>>  From diamproxy:52 oxy_conn_mgmt.c:3406 (Callid 4c0ea07a) 08:42:11:109
Eventid:81991(5)
Diameter message from 10.5.40.X:6000 to 10.0.231.Y:49417
Base Header Information:
   Version:            0x01        (1)
   Message Length:     0x000110    (272)
   Command Flags:      0x40        (64)  PXY
   Command Code:       0x00013e    (318) Authentication-Information-Answer
   Application ID:     0x01000023  (16777251)   3GPP-S6a
   Hop2Hop-ID:         0xadb40545  (2914256197)
   End2End-ID:         0x2cafadd5  (749710805)
  AVP Information:
     [M]  Session-Id
        Code:      0x00000107 (263) Session-Id
        Flags:     0x40       (64)  [M]
        Length:    0x000069   (105)
        Data: 0004-
diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNET;1276027002;2496613;5c204e8b-16502
     [M]  Auth-Session-State
        Code:      0x00000115 (277) Auth-Session-State
        Flags:     0x40       (64)  [M]
        Length:    0x00000c   (12)
        Data: NO_STATE_MAINTAINED (1)
     [M]  Origin-Host
        Code:      0x00000108 (264) Origin-Host
```

```
        Flags:     0x40       (64)  [M]
        Length:    0x000033   (51)
        Data: hss101.epc.mnc0XY.mcc404.3gppnetwork.org
     [M]  Origin-Realm
        Code:      0x00000128 (296) Origin-Realm
        Flags:     0x40       (64)  [M]
        Length:    0x000029  (41)
        Data: epc.mnc0XY.mcc404.3gppnetwork.org
     [M]  Result-Code
        Code:      0x0000010c (268) Result-Code
        Flags:     0x40       (64)  [M]
        Length:    0x00000c   (12)
        Data: DIAMETER_MISSING_AVP (5005) >> DIAMETER_MISSING_AVP(5005)received from HSS
     [M]  Failed-AVP
        Code:      0x00000117 (279) Failed-AVP
        Flags:     0x40       (64)  [M]
        Length:    0x000018   (24)
         [V] [M]  Visited-PLMN-Id
            Code:      0x0000057f (1407) Visited-PLMN-Id
            Flags:     0xc0       (192) [V]  [M]
            Length:    0x00000d   (13)
            Vendor-Id: 0x000028af (10415) 3GPP
            Data: 0x00
```

Troubleshooting

Esta sección proporciona a la información que usted puede utilizar para resolver problemas el problema de la degradación ASR KPI debido a un aumento en el motivo de desconexión MME-HS-usuario-desconocido.

El “submarino recogido de lunes” se rastrea y se compara con el decorado del éxito y fracaso. Las características admitidas AVP faltan en el AIRE del MME al servidor HS.

El mensaje acertado del AIRE y de AYA se captura del **rastro del submarino de lunes**. Éste es el mensaje del AIRE que se envía del MME a los HS:

```
INBOUND>>>>>  From diamproxy:52 oxy_conn_mgmt.c:3406 (Callid 4c0ea07a) 08:42:11:109
Eventid:81991(5)
Diameter message from 10.5.40.X:6000 to 10.0.231.Y:49417
Base Header Information:
   Version:            0x01        (1)
   Message Length:     0x000110    (272)
   Command Flags:      0x40        (64)  PXY
   Command Code:       0x00013e    (318) Authentication-Information-Answer
   Application ID:     0x01000023  (16777251)   3GPP-S6a
   Hop2Hop-ID:         0xadb40545  (2914256197)
   End2End-ID:         0x2cafadd5  (749710805)
  AVP Information:
     [M]  Session-Id
        Code:      0x00000107 (263) Session-Id
        Flags:     0x40       (64)  [M]
        Length:    0x000069   (105)
        Data: 0004-
diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNET;1276027002;2496613;5c204e8b-16502
     [M]  Auth-Session-State
        Code:      0x00000115 (277) Auth-Session-State
        Flags:     0x40       (64)  [M]
        Length:    0x00000c   (12)
        Data: NO_STATE_MAINTAINED (1)
     [M]  Origin-Host
```

```
        Code:      0x00000108 (264) Origin-Host
        Flags:     0x40       (64)  [M]
        Length:    0x000033   (51)
        Data: hss101.epc.mnc0XY.mcc404.3gppnetwork.org
     [M]  Origin-Realm
        Code:      0x00000128 (296) Origin-Realm
        Flags:     0x40       (64)  [M]
        Length:    0x000029  (41)
        Data: epc.mnc0XY.mcc404.3gppnetwork.org
     [M]  Result-Code
        Code:      0x0000010c (268) Result-Code
        Flags:     0x40       (64)  [M]
        Length:    0x00000c   (12)
        Data: DIAMETER_MISSING_AVP (5005) >> DIAMETER_MISSING_AVP(5005)received from HSS
     [M]  Failed-AVP
        Code:      0x00000117 (279) Failed-AVP
        Flags:     0x40       (64)  [M]
        Length:    0x000018   (24)
         [V] [M]  Visited-PLMN-Id
            Code:      0x0000057f (1407) Visited-PLMN-Id
            Flags:     0xc0       (192) [V]  [M]
            Length:    0x00000d   (13)
            Vendor-Id: 0x000028af (10415) 3GPP
            Data: 0x00
```

El mensaje de AYA que se envía de los HS al MME es:

```
INBOUND>>>>>  From diamproxy:52 oxy_conn_mgmt.c:3406 (Callid 4c0ea07a) 08:42:11:109
Eventid:81991(5)
Diameter message from 10.5.40.X:6000 to 10.0.231.Y:49417
Base Header Information:
   Version:            0x01        (1)
   Message Length:     0x000110    (272)
   Command Flags:      0x40        (64)  PXY
   Command Code:       0x00013e    (318) Authentication-Information-Answer
   Application ID:     0x01000023  (16777251)   3GPP-S6a
   Hop2Hop-ID:         0xadb40545  (2914256197)
   End2End-ID:         0x2cafadd5  (749710805)
  AVP Information:
     [M]  Session-Id
        Code:      0x00000107 (263) Session-Id
        Flags:     0x40       (64)  [M]
        Length:    0x000069   (105)
        Data: 0004-
diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNET;1276027002;2496613;5c204e8b-16502
     [M]  Auth-Session-State
        Code:      0x00000115 (277) Auth-Session-State
        Flags:     0x40       (64)  [M]
        Length:    0x00000c   (12)
        Data: NO_STATE_MAINTAINED (1)
     [M]  Origin-Host
        Code:      0x00000108 (264) Origin-Host
        Flags:     0x40       (64)  [M]
        Length:    0x000033   (51)
        Data: hss101.epc.mnc0XY.mcc404.3gppnetwork.org
     [M]  Origin-Realm
        Code:      0x00000128 (296) Origin-Realm
        Flags:     0x40       (64)  [M]
        Length:    0x000029  (41)
        Data: epc.mnc0XY.mcc404.3gppnetwork.org
     [M]  Result-Code
        Code:      0x0000010c (268) Result-Code
        Flags:     0x40       (64)  [M]
```

```
        Length:    0x00000c   (12)
        Data: DIAMETER_MISSING_AVP (5005) >> DIAMETER_MISSING_AVP(5005)received from HSS
     [M]  Failed-AVP
        Code:      0x00000117 (279) Failed-AVP
        Flags:     0x40       (64)  [M]
        Length:    0x000018   (24)
         [V] [M]  Visited-PLMN-Id
            Code:      0x0000057f (1407) Visited-PLMN-Id
            Flags:     0xc0       (192) [V]  [M]
            Length:    0x00000d   (13)
            Vendor-Id: 0x000028af (10415) 3GPP
            Data: 0x00
```

Los mensajes del AIRE y de AYA del error se capturan del **rastro del submarino de lunes**.

El mensaje del AIRE que se envía del MME a los HS es:

```
<<<<OUTBOUND  From diamproxy:52 diamproxy_rlf.c:553 (Callid 4c0ea07a) 08:42:11:089
Eventid:81990(5)
Diameter message from 10.0.231.Y:49417 to 10.5.40.X:6000
 Base Header Information:
  Version:            0x01        (1)
  Message Length:     0x000150    (336)
  Command Flags:      0xc0        (192) REQ PXY
  Command Code:       0x00013e    (318) Authentication-Information-Request
  Application ID:     0x01000023  (16777251)   3GPP-S6a
  Hop2Hop-ID:         0xadb40545  (2914256197)
  End2End-ID:         0x2cafadd5  (749710805)
 AVP Information:
    [M]  Session-Id
       Code:      0x00000107 (263) Session-Id
       Flags:     0x40       (64)  [M]
       Length:    0x000069   (105)
       Data: 0004-
diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNET;1276027002;2496613;5c204e8b-16502
    [M]  Auth-Session-State
       Code:      0x00000115 (277) Auth-Session-State
       Flags:     0x40       (64)  [M]
       Length:    0x00000c   (12)
       Data: NO_STATE_MAINTAINED (1)
    [M]  Origin-Host
       Code:      0x00000108 (264) Origin-Host
       Flags:     0x40       (64)  [M]
       Length:    0x00004f   (79)
       Data: 0004-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
    [M]  Origin-Realm
       Code:      0x00000128 (296) Origin-Realm
       Flags:     0x40       (64)  [M]
       Length:    0x00002d   (45)
       Data: MME.epc.mnc0XY.mcc404.3gppnetwork.org
    [M]  Destination-Realm
       Code:      0x0000011b (283) Destination-Realm
       Flags:     0x40       (64)  [M]
       Length:    0x000029   (41)
       Data: epc.mnc0XY.mcc404.3gppnetwork.org
    [M]  User-Name
       Code:      0x00000001 (1) User-Name
       Flags:     0x40       (64)  [M]
       Length:    0x000017   (23)
       Data: 404XY0000022222
```

El mensaje de AYA que se envía de los HS al MME es:

```
INBOUND>>>>>  From diamproxy:52 oxy_conn_mgmt.c:3406 (Callid 4c0ea07a) 08:42:11:109
Eventid:81991(5)
Diameter message from 10.5.40.X:6000 to 10.0.231.Y:49417
 Base Header Information:
  Version:            0x01        (1)
  Message Length:     0x000110    (272)
  Command Flags:      0x40        (64)  PXY
  Command Code:       0x00013e    (318) Authentication-Information-Answer
  Application ID:     0x01000023  (16777251)   3GPP-S6a
  Hop2Hop-ID:         0xadb40545  (2914256197)
  End2End-ID:         0x2cafadd5  (749710805)
 AVP Information:
    [M]  Session-Id
       Code:      0x00000107 (263) Session-Id
       Flags:     0x40       (64)  [M]
       Length:    0x000069   (105)
       Data: 0004-
diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNET;1276027002;2496613;5c204e8b-16502
    [M]  Auth-Session-State
       Code:      0x00000115 (277) Auth-Session-State
       Flags:     0x40       (64)  [M]
       Length:    0x00000c   (12)
       Data: NO_STATE_MAINTAINED (1)
    [M]  Origin-Host
       Code:      0x00000108 (264) Origin-Host
       Flags:     0x40       (64)  [M]
       Length:    0x000033   (51)
       Data: hss101.epc.mnc0XY.mcc404.3gppnetwork.org
    [M]  Origin-Realm
       Code:      0x00000128 (296) Origin-Realm
       Flags:     0x40       (64)  [M]
       Length:    0x000029   (41)
       Data: epc.mnc0XY.mcc404.3gppnetwork.org
    [M]  Result-Code
       Code:      0x0000010c (268) Result-Code
       Flags:     0x40       (64)  [M]
       Length:    0x00000c   (12)
        Data: DIAMETER_MISSING_AVP (5005)              >>DIAMETER_MISSING_AVP(5005)received from
HSS
    [M]  Failed-AVP
       Code:      0x00000117 (279) Failed-AVP
       Flags:     0x40       (64)  [M]
       Length:    0x000018   (24)
        [V] [M]  Visited-PLMN-Id
           Code:      0x0000057f (1407) Visited-PLMN-Id
           Flags:     0xc0       (192) [V]  [M]
           Length:    0x00000d   (13)
           Vendor-Id: 0x000028af (10415) 3GPP
           Data: 0x00
```

Según el **rastro del submarino de lunes**, el error “DIAMETER_MISSING_AVP (el 5005)" se recibe para 0004-diamproxy, que se asocia al indicador luminoso LED amarillo de la placa muestra gravedad menor 2 DPC solamente.

```
[local]SGSN-MME-03# show diameter  peers full endpoint DRA1 | grep -i -E "CPU|LOCAL HOST"
Monday December 24 11:34:47 IST 2018
 Local Hostname: 0001-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 8/1                                Task: diamproxy-49
 Local Hostname: 0002-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 9/1                                Task: diamproxy-50
 Local Hostname: 0003-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
```

```
 CPU: 3/1                                Task: diamproxy-51
  Local Hostname: 0004-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
  CPU: 2/1                                Task: diamproxy-52
 Local Hostname: 0005-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 4/1                                Task: diamproxy-53
 Local Hostname: 0006-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 7/1                                Task: diamproxy-54
 Local Hostname: 0001-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 8/1                                Task: diamproxy-49
 Local Hostname: 0002-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 9/1                                Task: diamproxy-50
 Local Hostname: 0003-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 3/1                                Task: diamproxy-51
 Local Hostname: 0004-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 2/1                                Task: diamproxy-52
 Local Hostname: 0005-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 4/1                                Task: diamproxy-53
 Local Hostname: 0006-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 7/1                                Task: diamproxy-54
[local]SGSN-MME-03#
```

Parece ser motivo de desconexión “MME-HS-usuario- **desconocido”** se aumenta para esos caso del sessmgr que citen como ejemplo asociado con el indicador luminoso LED amarillo de la placa muestra gravedad menor 2 DPC solamente.

```
[local]SGSN-MME-03# show diameter  peers full endpoint DRA1 | grep -i -E "CPU|LOCAL HOST"
Monday December 24 11:34:47 IST 2018
 Local Hostname: 0001-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 8/1                                Task: diamproxy-49
 Local Hostname: 0002-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 9/1                                Task: diamproxy-50
 Local Hostname: 0003-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 3/1                                Task: diamproxy-51
  Local Hostname: 0004-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
  CPU: 2/1                                Task: diamproxy-52
 Local Hostname: 0005-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 4/1                                Task: diamproxy-53
 Local Hostname: 0006-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 7/1                                Task: diamproxy-54
 Local Hostname: 0001-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 8/1                                Task: diamproxy-49
 Local Hostname: 0002-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 9/1                                Task: diamproxy-50
 Local Hostname: 0003-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 3/1                                Task: diamproxy-51
 Local Hostname: 0004-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 2/1                                Task: diamproxy-52
 Local Hostname: 0005-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 4/1                                Task: diamproxy-53
 Local Hostname: 0006-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 CPU: 7/1                                Task: diamproxy-54
[local]SGSN-MME-03#

Disconnect reason for smgr-instance 749:
[local]SGSN-MME-03# show session disconnect-reasons smgr-instance 749|grep -i hss-us
Monday December 24 13:45:17 IST 2018
mme-hss-user-unknown                                    788     8.97597
[local]SGSN-MME-03# show session disconnect-reasons smgr-instance 749|grep -i hss-us
Monday December 24 13:45:19 IST 2018
mme-hss-user-unknown                                    790     8.99158
-------------------- -
Disconnect reason for smgr-instance 762:
[local]SGSN-MME-03# show session disconnect-reasons smgr-instance 762|grep -i hss-us
```

```
Monday December 24 13:45:26 IST 2018
mme-hss-user-unknown                                        743     8.16125
[local]SGSN-MME-03# show session disconnect-reasons smgr-instance 762|grep -i hss-us
Monday December 24 13:45:31 IST 2018
mme-hss-user-unknown                                        744     8.16147
[local]SGSN-MME-03# show session disconnect-reasons smgr-instance 762|grep -i hss-us
Monday December 24 13:45:32 IST 2018
mme-hss-user-unknown                                        749     8.20732
[local]SGSN-MME-03# show session disconnect-reasons smgr-instance 762|grep -i hss-us
Monday December 24 13:45:34 IST 2018
mme-hss-user-unknown                                        750     8.20659
```

Cuando estaban controlados más lejos, los IDs utilizados del vendedor no habían sido “ningunos” para el par HS con el indicador luminoso LED amarillo de la placa muestra gravedad menor 2. DPC.

```
[local]SGSN-MME-03# show diameter peers full peer-host dra01.epc.mnc0XY.mcc404.3gppnetwork.org

--------------------------------------------------------------------------------
Context: s6a Endpoint: HSS_DRA01
--------------------------------------------------------------------------------
Peer Hostname: dra01.epc.mnc0xy.mcc404.3gppnetwork.org
 Local Hostname: 0004-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 Peer Realm: epc.mnc0XY.mcc404.3gppnetwork.org
 Local Realm: MME.epc.mnc0XY.mcc404.3gppnetwork.org
 Peer Address: 10.5.40.X:6000
 State: OPEN [SCTP]
 CPU: 2/1                                Task: sessmgr-4
 Messages Out/Queued: H0.L0/H0.L0
 Supported Vendor IDs: None                          >> Supported Vendor IDs: none instead of
10415
  Admin Status: Enable
  DPR Disconnect: N/A
  Peer Backoff Timer running:N/A
-----------
Peer Hostname: dra01.epc.mnc0xy.mcc404.3gppnetwork.org
  Local Hostname: 0004-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
  Peer Realm: epc.mnc0XY.mcc404.3gppnetwork.org
  Local Realm: MME.epc.mnc0XY.mcc404.3gppnetwork.org
  Peer Address: 10.5.40.X:6000
  State: OPEN [SCTP]
  CPU: 2/2                                 Task: sessmgr-8
  Messages Out/Queued: H0.L0/H0.L0
  Supported Vendor IDs: None                           >> Supported Vendor IDs: none instead of
10415
  Admin Status: Enable
  DPR Disconnect: N/A
  Peer Backoff Timer running:N/A
------------
Peer Hostname: dra01.epc.mnc0xy.mcc404.3gppnetwork.org
  Local Hostname: 0004-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
  Peer Realm: epc.mnc0XY.mcc404.3gppnetwork.org
  Local Realm: MME.epc.mnc0XY.mcc404.3gppnetwork.org
 Peer Address: 10.5.40.X:6000
  State: OPEN [SCTP]
  CPU: 2/0                                 Task: sessmgr-15
  Messages Out/Queued: H0.L0/H0.L0
  Supported Vendor IDs: None                           >> Supported Vendor IDs: none instead of
10415
  Admin Status: Enable
  DPR Disconnect: N/A
  Peer Backoff Timer running:N/A
------------
```

Peer Hostname: dra01.epc.mnc0xy.mcc404.3gppnetwork.org

```
  Local Hostname: 0004-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
  Peer Realm: epc.mnc0XY.mcc404.3gppnetwork.org
  Local Realm: MME.epc.mnc0XY.mcc404.3gppnetwork.org
  Peer Address: 10.5.40.X:6000
  State: OPEN [SCTP]
  CPU: 2/0                                Task: sessmgr-20
  Messages Out/Queued: H0.L0/H0.L0
  Supported Vendor IDs: None                          >> Supported Vendor IDs: none instead of
10415
  Admin Status: Enable
  DPR Disconnect: N/A
  Peer Backoff Timer running:N/A
------------
Peer Hostname: dra01.epc.mnc0xy.mcc404.3gppnetwork.org
  Local Hostname: 0004-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
  Peer Realm: epc.mnc0XY.mcc404.3gppnetwork.org
  Local Realm: MME.epc.mnc0XY.mcc404.3gppnetwork.org
  Peer Address: 10.5.40.X:6000
  State: OPEN [SCTP]
  CPU: 2/1                                Task: sessmgr-27
  Messages Out/Queued: H0.L0/H0.L0
  Supported Vendor IDs: None                          >> Supported Vendor IDs: none instead of
10415
  Admin Status: Enable
  DPR Disconnect: N/A
  Peer Backoff Timer running:N/A

<additional outputs supressed>
```

Solución

Parece que los “IDs utilizados” AVP del vendedor no están negociados con el indicador luminoso LED amarillo de la placa muestra gravedad menor 2 DPC y así que observan al error para ese indicador luminoso LED amarillo de la placa muestra gravedad menor solamente.

Según el RFC 3588,

Utilizar-Vendedor-identificación AVP - Esto se utiliza en los mensajes CER y CEA para informar al par que el remitente utiliza (un subconjunto de) el AVPs vendedor-específico definido por el vendedor identificado en este AVP.

Vendedor-identificación AVP - Conjuntamente con la Utilizar-Vendedor-identificación AVP, esto se pudo utilizar para saber qué atributos específicos del proveedor se pudieron enviar al par.

Para intercambiar las capacidades entre el par del diámetro y el cliente, este plan de acción se sugiere al proveedor de servicio.

El plan de acción es emigrar el indicador luminoso LED amarillo de la placa muestra gravedad menor 2 DPC con el indicador luminoso LED amarillo de la placa muestra gravedad menor espera 10. DPC.

```
[local]SGSN-MME-03# show diameter peers full peer-host dra01.epc.mnc0XY.mcc404.3gppnetwork.org

--------------------------------------------------------------------------------
Context: s6a Endpoint: HSS_DRA01
--------------------------------------------------------------------------------
Peer Hostname: dra01.epc.mnc0xy.mcc404.3gppnetwork.org
 Local Hostname: 0004-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 Peer Realm: epc.mnc0XY.mcc404.3gppnetwork.org
 Local Realm: MME.epc.mnc0XY.mcc404.3gppnetwork.org
 Peer Address: 10.5.40.X:6000
 State: OPEN [SCTP]
 CPU: 2/1                                Task: sessmgr-4
 Messages Out/Queued: H0.L0/H0.L0
```

```
 Supported Vendor IDs: None                          >> Supported Vendor IDs: none instead of
10415
  Admin Status: Enable
  DPR Disconnect: N/A
  Peer Backoff Timer running:N/A
-----------
Peer Hostname: dra01.epc.mnc0xy.mcc404.3gppnetwork.org
  Local Hostname: 0004-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
  Peer Realm: epc.mnc0XY.mcc404.3gppnetwork.org
  Local Realm: MME.epc.mnc0XY.mcc404.3gppnetwork.org
  Peer Address: 10.5.40.X:6000
  State: OPEN [SCTP]
  CPU: 2/2                                Task: sessmgr-8
  Messages Out/Queued: H0.L0/H0.L0
  Supported Vendor IDs: None                          >> Supported Vendor IDs: none instead of
10415
  Admin Status: Enable
  DPR Disconnect: N/A
  Peer Backoff Timer running:N/A
------------
Peer Hostname: dra01.epc.mnc0xy.mcc404.3gppnetwork.org
  Local Hostname: 0004-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
  Peer Realm: epc.mnc0XY.mcc404.3gppnetwork.org
  Local Realm: MME.epc.mnc0XY.mcc404.3gppnetwork.org
 Peer Address: 10.5.40.X:6000
  State: OPEN [SCTP]
  CPU: 2/0                                Task: sessmgr-15
  Messages Out/Queued: H0.L0/H0.L0
  Supported Vendor IDs: None                          >> Supported Vendor IDs: none instead of
10415
  Admin Status: Enable
  DPR Disconnect: N/A
  Peer Backoff Timer running:N/A
------------
Peer Hostname: dra01.epc.mnc0xy.mcc404.3gppnetwork.org
  Local Hostname: 0004-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
  Peer Realm: epc.mnc0XY.mcc404.3gppnetwork.org
  Local Realm: MME.epc.mnc0XY.mcc404.3gppnetwork.org
  Peer Address: 10.5.40.X:6000
  State: OPEN [SCTP]
  CPU: 2/0                                Task: sessmgr-20
  Messages Out/Queued: H0.L0/H0.L0
  Supported Vendor IDs: None                          >> Supported Vendor IDs: none instead of
10415
  Admin Status: Enable
  DPR Disconnect: N/A
  Peer Backoff Timer running:N/A
------------
Peer Hostname: dra01.epc.mnc0xy.mcc404.3gppnetwork.org
  Local Hostname: 0004-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
  Peer Realm: epc.mnc0XY.mcc404.3gppnetwork.org
  Local Realm: MME.epc.mnc0XY.mcc404.3gppnetwork.org
  Peer Address: 10.5.40.X:6000
  State: OPEN [SCTP]
  CPU: 2/1                                Task: sessmgr-27
  Messages Out/Queued: H0.L0/H0.L0
  Supported Vendor IDs: None                          >> Supported Vendor IDs: none instead of
10415
  Admin Status: Enable
  DPR Disconnect: N/A
  Peer Backoff Timer running:N/A

<additional outputs supressed>
```

El proveedor de servicio realizó la migración del indicador luminoso LED amarillo de la placa muestra gravedad menor 2 DPC con el indicador luminoso LED amarillo de la placa muestra gravedad menor espera 10. DPC.

Fije la actividad, el vendedor apoyado IDs(10415) aparecido para ser aceptable para el indicador luminoso LED amarillo de la placa muestra gravedad menor 10 con el HS-par respectivo y el ASR KPI parecía ser aceptable también.

```
[local]SGSN-MME-03# show diameter peers full peer-host dra01.epc.mnc0XY.mcc404.3gppnetwork.org

--------------------------------------------------------------------------------
Context: s6a Endpoint: HSS_DRA01
--------------------------------------------------------------------------------
Peer Hostname: dra01.epc.mnc0xy.mcc404.3gppnetwork.org
 Local Hostname: 0004-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 Peer Realm: epc.mnc0XY.mcc404.3gppnetwork.org
 Local Realm: MME.epc.mnc0XY.mcc404.3gppnetwork.org
 Peer Address: 10.5.40.X:6000
 State: OPEN [SCTP]
 CPU: 10/1                              Task: sessmgr-4
 Messages Out/Queued: H0.L0/H0.L0
 Supported Vendor IDs: 10415                          >> Supported Vendor IDs: 10415
  Admin Status: Enable
  DPR Disconnect: N/A
  Peer Backoff Timer running:N/A
------------
  Peer Hostname: dra01.epc.mnc0xy.mcc404.3gppnetwork.org
  Local Hostname: 0004-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
  Peer Realm: epc.mnc0XY.mcc404.3gppnetwork.org
  Local Realm: MME.epc.mnc0XY.mcc404.3gppnetwork.org
  Peer Address: 10.5.40.X:6000
  State: OPEN [SCTP]
  CPU: 10/0                              Task: sessmgr-15
  Messages Out/Queued: H0.L0/H0.L0
Supported Vendor IDs: 10415                          >> Supported Vendor IDs: 10415
  Admin Status: Enable
 DPR Disconnect: N/A
 Peer Backoff Timer running:N/A
------------
Peer Hostname: dra01.epc.mnc0xy.mcc404.3gppnetwork.org
 Local Hostname: 0004-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
 Peer Realm: epc.mnc0XY.mcc404.3gppnetwork.org
 Local Realm: MME.epc.mnc0XY.mcc404.3gppnetwork.org
 Peer Address: 10.5.40.X:6000
 State: OPEN [SCTP]
 CPU: 10/1                              Task: sessmgr-27
 Messages Out/Queued: H0.L0/H0.L0
 Supported Vendor IDs: 10415                          >> Supported Vendor IDs: 10415
  Admin Status: Enable
  DPR Disconnect: N/A
  Peer Backoff Timer running:N/A
------------
Peer Hostname: dra01.epc.mnc0xy.mcc404.3gppnetwork.org
  Local Hostname: 0004-diamproxy.MMEC001.MMEGI32000.MME.EPC.MNC0XY.MCC404.3GPPNETWORK.ORG
  Peer Realm: epc.mnc0XY.mcc404.3gppnetwork.org
  Local Realm: MME.epc.mnc0XY.mcc404.3gppnetwork.org
  Peer Address: 10.5.40.X:6000
  State: OPEN [SCTP]
  CPU: 10/2                              Task: sessmgr-29
  Messages Out/Queued: H0.L0/H0.L0
 Supported Vendor IDs: 10415                          >> Supported Vendor IDs: 10415
 Admin Status: Enable
 DPR Disconnect: N/A
```

```
 Peer Backoff Timer running:N/A

<additional outputs supressed>
```

Los IDs utilizados del vendedor deben estar de valor '10415' cuando la conexión de peer del diámetro se establece entre el MME y los HS para intercambiar los mensajes operativos del diámetro.