

OsmoGGSN (former OpenGGSN) - Bug #3215

GGSN_Tests.ttcn GTP-U sequence number handling incompatible with kernel GTP-U

04/25/2018 01:38 PM - laforge

Status:	Resolved	Start date:	04/25/2018
Priority:	Normal	Due date:	
Assignee:	laforge	% Done:	100%
Category:			
Target version:			
Spec Reference:			

Description

When running GGSN_Tests.TC_pdp4_act_deact_gtpu_access, I'm getting an error despite the ICMP being responded:

```
15:26:24.165526 IP 10.1.1.1 > 192.168.100.1: ICMP echo request, id 837, seq 1, length 8
```

```
15:26:24.165550 IP 192.168.100.1 > 10.1.1.1: ICMP echo reply, id 837, seq 1, length 8
```

```
15:26:24.164901 GGSN_Tests.ttcn:212 Sent on GTPU to system @GTP_CodecPort.GtpluUnitdata : { peer :  
= { connId := 1, remName := "192.168.111.151", remPort := 2152 }, gtpu := { pn_bit := '0'B, s_bit  
:= '1'B, e_bit := '0'B, spare := '0'B, pt := '1'B, version := '001'B, messageType := 'FF'O, length  
f := 0, teid := '00000001'O, opt_part := { sequenceNumber := '8A19'O, npduNumber := '00'O, nextExt  
Header := '00'O, gTPU_extensionHeader_List := omit }, gtpu_IEs := { g_PDU_IEs := { data := '450000  
1C8C3E400040017EF70A010101C0A864010800F4B903450001'O } } }
```

```
15:26:24.164971 GTP_CodecPort.ttcn:73 enc_PDU_GTPU(): Encoding @GTPU_Types.PDU_GTPU: { pn_bit := '  
0'B, s_bit := '1'B, e_bit := '0'B, spare := '0'B, pt := '1'B, version := '001'B, messageType := 'F  
F'O, lengthf := 0, teid := '00000001'O, opt_part := { sequenceNumber := '8A19'O, npduNumber := '00  
'O, nextExtHeader := '00'O, gTPU_extensionHeader_List := omit }, gtpu_IEs := { g_PDU_IEs := { data  
:= '4500001C8C3E400040017EF70A010101C0A864010800F4B903450001'O } } }
```

```
15:26:24.165066 GTP_CodecPort.ttcn:73 enc_PDU_GTPU(): Stream after encoding: '32FF0020000000018A19  
00004500001C8C3E400040017EF70A010101C0A864010800F4B903450001'O
```

```
15:26:24.165115 GGSN_Tests.ttcn:212 Outgoing message was mapped to @IPL4asp_Types.ASP_SendTo : { c  
onnId := 1, remName := "192.168.111.151", remPort := 2152, proto := { udp := { } }, msg := '32FF00  
20000000018A1900004500001C8C3E400040017EF70A010101C0A864010800F4B903450001'O }
```

```
15:26:24.165310 GGSN_Tests.ttcn:603 Start timer T_default: 3 s
```

```
15:26:24.165679 GGSN_Tests.ttcn:604 Message enqueued on GTPU from system @IPL4asp_Types.ASP_RecvFr  
om : { connId := 1, remName := "192.168.111.151", remPort := 2152, locName := "192.168.111.1", loc  
Port := 2152, proto := { udp := { } }, userData := 0, msg := '30FF001C653670634500001C069600004001  
44A0C0A864010A0101010000FCB903450001'O } id 1
```

```
15:26:24.165928 GGSN_Tests.ttcn:604 Incoming message was mapped to @GTP_CodecPort.GtpluUnitdata :  
{ peer := { connId := 1, remName := "192.168.111.151", remPort := 2152 }, gtpu := { pn_bit := '0'B  
, s_bit := '0'B, e_bit := '0'B, spare := '0'B, pt := '1'B, version := '001'B, messageType := 'FF'O  
, lengthf := 28, teid := '65367063'O ("e6pc"), opt_part := omit, gtpu_IEs := { g_PDU_IEs := { data  
:= '4500001C06960000400144A0C0A864010A0101010000FCB903450001'O } } } id 1
```

```
15:26:24.166076 GGSN_Tests.ttcn:605 Matching on port GTPU succeeded: matched
```

```
15:26:24.166117 GGSN_Tests.ttcn:605 Receive operation on port GTPU succeeded, message from system(  
): @GTP_CodecPort.GtpluUnitdata : { peer := { connId := 1, remName := "192.168.111.151", remPort :  
= 2152 }, gtpu := { pn_bit := '0'B, s_bit := '0'B, e_bit := '0'B, spare := '0'B, pt := '1'B, versi  
on := '001'B, messageType := 'FF'O, lengthf := 28, teid := '65367063'O ("e6pc"), opt_part := omit,  
gtpu_IEs := { g_PDU_IEs := { data := '4500001C06960000400144A0C0A864010A0101010000FCB903450001'O  
} } } id 1
```

```
15:26:24.166151 GGSN_Tests.ttcn:605 Message with id 1 was extracted from the queue of GTPU.
```

```
15:26:24.166200 GGSN_Tests.ttcn:120 GTPU sequence number expected but not present
```

```
15:26:24.166262 GGSN_Tests.ttcn:607 setverdict(fail): pass -> fail
```

So the test expect GTP-U sequence numbers being present, but the kernel GTP-U doesn't seem to implement this.

We might need some separate, more relaxed tests for the kernel GTP side, and/or implement GTP-U sequence number handling in kernel + libgtpnl.

Related issues:

Related to OsmoGGSN (former OpenGGSN) - Bug #3208: automatic test setup for O...

Stalled

04/24/2018

History

#1 - 04/25/2018 01:38 PM - laforge

- Subject changed from @GGSN_Tests.ttcn@ GTP-U sequence number handling incompatible with kernel GTP-U to GGSN_Tests.ttcn GTP-U sequence number handling incompatible with kernel GTP-U

#2 - 04/25/2018 01:39 PM - laforge

- Related to Bug #3208: automatic test setup for OsmoGGSN with kernel-gtp-u added

#3 - 04/26/2018 08:45 AM - laforge

- Status changed from New to In Progress

- Assignee set to laforge

- % Done changed from 0 to 70

Patch in <https://gerrit.osmocom.org/7935>

#4 - 04/26/2018 08:04 PM - laforge

- % Done changed from 70 to 100

patch merged

#5 - 04/29/2018 08:50 AM - laforge

- Status changed from In Progress to Resolved