

OsmoPCU - Bug #2384

NSVCI=0 seems to cause problems

07/20/2017 03:47 PM - laforge

Status: New	Start date: 07/20/2017
Priority: Low	Due date:
Assignee: laforge	% Done: 0%
Category:	
Target version:	
Spec Reference:	
Description	
If I configure NSVCI=0 in oms0-bsc.cfg for a given BTS, OsmoPCU will behave erratically in terms of the NS protocol layer towards the SGSN.	
Basically, OsmoPCU will at some point decide the NS-VC is no longer alive and refuse NS_ALIVE messages from the SGSN with "NS_STATUS, Cause: PDU not compatible with protocol state"	
Related issues:	
Related to OsmoPCU - Bug #2401: OsmoPCU accepts UDP packets from any source	Closed 07/25/2017
Related to OsmoPCU - Bug #4111: BSSGP SUSPEND ACK with unknown BVCI=0	Resolved 07/17/2019

History

#1 - 07/20/2017 03:51 PM - laforge

the problem is not 100% reproducible. In some cases, OsmoPCU will send FLOW-CONTROL PDUs every second, in which time the NS-VC stays alive. Only if there are no NS-PDUs exchanged for 60 seconds, OsmoPCU will start rejecting the NS_ALIVE PDU.

So something must be inhibiting the generation of NS_ALIVE in PCU-SGSN direction, as well as inhibiting the FLOW-CONTROL.

Interestingly, "show ns" on the PCU will show

```
Osmo-PCU# show ns
Encapsulation NS-UDP-IP      Local IP: 0.0.0.0, UDP Port: 21000
Encapsulation NS-FR-GRE-IP  Local IP: 0.0.0.0
NSEI      96, NS-VC      0, Remote: SGSN, ALIVE UNBLOCKED, UDP      172.31.0.1:23000
```

#2 - 07/25/2017 05:50 PM - laforge

- Priority changed from Normal to Low

this might have been a "false flag" as two SGSNs were sending UDP packets to the PCU simultaneously. This in turn makes me wonder why we would accept UDP packets from a source address that doesn't equal the IP/port specified in the NSVC configuration.

#3 - 07/25/2017 05:54 PM - laforge

- Related to Bug #2401: OsmoPCU accepts UDP packets from any source added

#4 - 11/07/2019 09:58 PM - fixeria

- Related to Bug #4111: BSSGP SUSPEND ACK with unknown BVCI=0 added