Troubleshoot Populating nodeID Field in SGW CDR with Value 1

Contents

Introduction

This document describes how to address the issue when **nodeID** field in Serving Gateway (SGW) Charging Data Record (CDR) is populated with value 1.

Problem

The nodeID field in the SGW CDR is sometimes populated with the value 1, whereas it is expected to follow the ndddSTRING format. In this format, n represents the Session Manager (SessMgr) restart counter (ranging from 0 to 7), ddd is the SessMgr instance generating the CDR, and STRING is a string of 1 to 16 characters.

Analysis

The issue appears to be caused by the SGW CDR being triggered by a 4-digit AAA Manager (AAAmgr) and SessMgr instance, while the current implementation supports an AAAmgr/SessMgr instance range of 0-998 for the nodeID field in the SGW CDR. The log snippet captures an event where the AAAmgr instance 1046 initiates a GTPP Data Record Transfer Request Message, sending CDR data from 10.10.10.10:49999 to 10.10.10.20:3386, with nodeID set to 1.

<#root>

2024-Jul-17+08:30:12.322 [gtpp 52037 info] [1/2/14746 <

aaamgr:1046

> gr_gtpp_proxy.c:494] [context: Ga, contextID: 4] [software internal security system syslog]

AAAmgr instance 1046 sending request with 1 GCDRs to aaaproxy

```
<<<<OUTBOUND  From aaaproxy:1 proxy_handler.c:1001 (Callid 716bbe13) 08:30:12:322 Eventid:66001(7)
CDR Tx from 10.10.10.10:49999 to 10.10.10.20:3386 (241) PDU-dict=custom24
Message Type: GTPP_DATA_RECORD_TRANSFER_REQUEST_MSG (0xf0)
CDR ELEMENTS FOLLOW
  recordType                    SGWRECORD
  ...
```

nodeID   1

. . .

Solution

To address the problem the supported range for AAAmgr/SessMgr instance in nodeID field in SGW CDR is extended up to 0-4095 starting 21.28.m29/21.28.mh21 release onwards.