

核心网产品 - 错误 #2822

16P_Pre1T2压力测试中，核心网从82切换到80

2025-02-17 15:19 - 黄毅

状态:	已解决	开始日期:	2025-02-17
优先级:	高	计划完成日期:	
指派给:	黄毅	% 完成:	0%
类别:		预期时间:	0.00 小时
目标版本:		耗时:	0.00 小时
描述			
系统压力测试过程中发生核心网从82切换到80，测试时长大概2天，AMF模块挂死。 核心网版本3.2.3pre7。在这个版本上偶现1次，后面继续观察。			

历史记录

#1 - 2025-02-19 10:51 - 黄毅

2/19压力测试，核心网从80切换到82了，问题复现1次。

#2 - 2025-02-19 11:00 - 徐红超

- 状态 从 新建 变更为 进行中
- 优先级 从 普通 变更为 高

#3 - 2025-02-20 16:19 - 徐红超

fatal error: concurrent map read and map write
goroutine 1758525 [running]:
runtime.throw(0x1138901, 0x21)
#011/usr/local/go/src/runtime/panic.go:1116 +0x72 fp=0xc0005e70f8 sp=0xc0005e70c8 pc=0x433372
runtime.mapaccess1_faststr(0xf9aae0, 0xc000434510, 0x1120eb9, 0xb, 0x1)
#011/usr/local/go/src/runtime/map_faststr.go:21 +0x43c fp=0xc0005e7168 sp=0xc0005e70f8 pc=0x4129fc
github.com/free5gc/amf/internal/sbi/producer.N1N2MessageTransferProcedure(0xc0006e40da, 0x14, 0xc0006e40c0, 0x3d, 0xc0000bc5b0, 0xc00021cc00, 0x45, 0x3e8, 0xc00021d000, 0x2f, ...)
#011/home/ngc/go/src/free5gc/NFs/amf/internal/sbi/producer/n1n2message.go:229 +0xf7a fp=0xc0005e76d8 sp=0xc0005e7168 pc=0xe340fa
github.com/free5gc/amf/internal/sbi/producer.HandleN1N2MessageTransferRequest(0xc000434c30, 0xc0003a8500, 0x111c83a, 0x6)
#011/home/ngc/go/src/free5gc/NFs/amf/internal/sbi/producer/n1n2message.go:30 +0x219 fp=0xc0005e7840 sp=0xc0005e76d8 pc=0xe32c39
github.com/free5gc/amf/internal/sbi/communication.HTTPN1N2MessageTransfer(0xc0003a8500)

#4 - 2025-02-20 16:25 - 徐红超

amflog:
time="2025-02-17T03:50:03+08:00" level=info msg="Select SMF [snssai: {Sst:1 Sd:010203}, dnn: internet]" amf_ue_ngap_id="AMF_UE_NGAP_ID:42319" category=GMM component=AMF supi="SUPI:imsi-001010000000005"
time="2025-02-17T03:50:03+08:00" level=info msg="create smContext[pduSessionID: 6] Success" amf_ue_ngap_id="AMF_UE_NGAP_ID:42319" category=GMM component=AMF supi="SUPI:imsi-001010000000005"
time="2025-02-17T03:50:03+08:00" level=info msg="Handle UE Context Release Request" amf_ue_ngap_id="AMF_UE_NGAP_ID:42319" category=NGAP component=AMF ran_addr="192.168.2.176:38412"
time="2025-02-17T03:50:03+08:00" level=warning msg="Cause RadioNetwork²⁰" category=NGAP component=AMF ran_addr="192.168.2.176:38412"
time="2025-02-17T03:50:03+08:00" level=info msg="Ue Context in GMM-Registered" amf_ue_ngap_id="AMF_UE_NGAP_ID:42319" category=NGAP component=AMF ran_addr="192.168.2.176:38412"
time="2025-02-17T03:50:03+08:00" level=info msg="Ue Context in GMM-Registered,pDUSessionResourceList is nil" amf_ue_ngap_id="AMF_UE_NGAP_ID:42319" category=NGAP component=AMF ran_addr="192.168.2.176:38412"
time="2025-02-17T03:50:03+08:00" level=info msg="***Handle N1N2 Message Transfer Request" category=Producer component=AMF

#5 - 2025-02-20 16:25 - 徐红超

修复该问题后：出现其它挂死地方：
[Switching to LWP 7348]
0x000000000e28c8d in github.com/free5gc/amf/internal/gmm.HandleServiceRequest.func1 (key=..., value=..., ~r2=<optimized out>)
at /home/ngc/go/src/free5gc/NFs/amf/internal/gmm/handler.go:1739
1739 /home/ngc/go/src/free5gc/NFs/amf/internal/gmm/handler.go: No such file or directory.
(gdb) bt
#0 0x000000000e28c8d in github.com/free5gc/amf/internal/gmm.HandleServiceRequest.func1 (key=..., value=..., ~r2=<optimized out>)
at /home/ngc/go/src/free5gc/NFs/amf/internal/gmm/handler.go:1739
#1 0x00000000047bc45 in sync.(Map).Range (m=0xc00018960, f={void (interface {}), interface {}, bool *}) 0xc0000a5360 at /usr/local/go/src/sync/map.go:333
#2 0x000000000e1c16a in github.com/free5gc/amf/internal/gmm.HandleServiceRequest (ue=0xc00018600, anType=..., serviceRequest=0xc000719b00, ~r3=...) at /home/ngc/go/src/free5gc/NFs/amf/internal/gmm/handler.go:1704

#3 0x000000000e235e8 in github.com/free5gc/amf/internal/gmm.Registered (state=0xc0003634a0, event=..., args=0xc000719b60)
at /home/ngc/go/src/free5gc/NFs/amf/internal/gmm/sm.go:96
#4 0x000000000a67d36 in github.com/free5gc/util/fsm.(*FSM).SendEvent (fsm=0xc000512060, state=0xc0003634a0, event=..., args=0xc000719b60, ~r3=...)
at /home/ngc/go/pkg/mod/github.com/free5gc/util@v1.0.3/fsm/fsm.go:98
#5 0x000000000e29f9e in github.com/free5gc/amf/internal/nas.Dispatch (ue=0xc000018600, accessType=..., procedureCode=46, msg=0xc000386240, ~r4=...)
at /home/ngc/go/src/free5gc/NFs/amf/internal/nas/dispatch.go:27
#6 0x000000000e2a2a9 in github.com/free5gc/amf/internal/nas.HandleNAS (ue=0xc00018c480, procedureCode=46, nasPdu=...)
at /home/ngc/go/src/free5gc/NFs/amf/internal/nas/handler.go:33
#7 0x000000000e45ae4 in github.com/free5gc/amf/internal/ngap.HandleUplinkNasTransport (ran=0xc0005ee000, message=0xc000520f40)
at /home/ngc/go/src/free5gc/NFs/amf/internal/ngap/handler.go:241
#8 0x000000000e43260 in github.com/free5gc/amf/internal/ngap.Dispatch (conn=..., msg=...) at /home/ngc/go/src/free5gc/NFs/amf/internal/ngap/dispatcher.go:61
#9 0x000000000e6edb0 in github.com/free5gc/amf/internal/ngap/service.handleConnection (conn=0xc0005aa040, bufsize=8192, handler=...)
at /home/ngc/go/src/free5gc/NFs/amf/internal/ngap/service/service.go:206
#10 0x000000000e463421 in runtime.goexit () at /usr/local/go/src/runtime/asm_amd64.s:1373
#11 0x000000c0005aa040 in ?? ()
#12 0x0000000000020000 in ?? ()
#13 0x00000000011614e0 in func. ()
#14 0x00000000011614f8 in func.* ()
#15 0x0000000000000000 in ?? ()

#6 - 2025-02-20 16:26 - 徐红超

amflog:
time="2025-02-20T14:41:29+08:00" level=warning msg="Parse AMBR failed strconv.ParseFloat: parsing \"2Gbps\": invalid syntax" category=NGAP component=LIB
time="2025-02-20T14:41:29+08:00" level=warning msg="Parse AMBR failed strconv.ParseFloat: parsing \"2Gbps\": invalid syntax" category=NGAP component=LIB
time="2025-02-20T14:41:29+08:00" level=info msg="Handle Initial Context Setup Response" amf_ue_ngap_id="AMF_UE_NGAP_ID:2120" category=NGAP
component=AMF ran_addr="192.168.2.176:38412"
time="2025-02-20T14:41:29+08:00" level=info msg="[OAM] Handle Registered gnb Context" category=Producer component=AMF
time="2025-02-20T14:41:29+08:00" level=info msg="[200 | 192.168.2.139 | GET | /namf-oam/v1/registered-gnb-context | " category=GIN component=AMF
time="2025-02-20T14:41:29+08:00" level=info msg="[OAM] Handle Registered UE Context" category=Producer component=AMF
time="2025-02-20T14:41:29+08:00" level=info msg="[200 | 192.168.2.139 | GET | /namf-oam/v1/registered-ue-context | " category=GIN component=AMF
time="2025-02-20T14:41:29+08:00" level=info msg="Handle UE Context Release Complete" amf_ue_ngap_id="AMF_UE_NGAP_ID:2119" category=NGAP
component=AMF ran_addr="192.168.2.176:38412"
time="2025-02-20T14:41:29+08:00" level=info msg="Rel Ue Context in GMM-Registered" amf_ue_ngap_id="AMF_UE_NGAP_ID:2119" category=NGAP
component=AMF ran_addr="192.168.2.176:38412"
time="2025-02-20T14:41:29+08:00" level=info msg="Release UE[imsi-001010000000005] Context : N2 Connection Release"
amf_ue_ngap_id="AMF_UE_NGAP_ID:2119" category=NGAP component=AMF ran_addr="192.168.2.176:38412"
time="2025-02-20T14:41:30+08:00" level=info msg="Uplink NAS Transport (RAN UE NGAP ID: 264)" amf_ue_ngap_id="AMF_UE_NGAP_ID:2120"
category=NGAP component=AMF ran_addr="192.168.2.176:38412"
time="2025-02-20T14:41:30+08:00" level=info msg="Handle event[Gmm Message], transition from [Registered] to [Registered]" category=FSM component=LIB
time="2025-02-20T14:41:30+08:00" level=info msg="Handle Service Request" category=GMM component=AMF supi="SUPI:imsi-001010000000005"

#7 - 2025-02-20 16:28 - 徐红超

- 文件1.jpg 已添加

Source	Destination	Protocol	Length	AMF-UE-NC	UE-NGAP	5G-TMSI	Info
302 192.168.2.176	192.168.2.140	NGAP	104	985	264		InitialContextSetupResponse
303 192.168.2.176	192.168.2.140	NGAP	92	985	264		UEContextReleaseRequest [Cause: RadioNetwork=user-inactivity]
307 192.168.2.140	192.168.2.176	NGAP	104	985	264		UEContextReleaseCommand [Cause: RadioNetwork=user-inactivity]
309 192.168.2.176	192.168.2.140	NGAP	120	985	264		UEContextReleaseComplete
976 192.168.2.176	192.168.2.140	NGAP/NAS-5GS/NAS-5GS	164	264	264	100 (0x00000064),100 (0x00000064)	InitialUEMessage, Service request, Service request [RRCEstablishmentCause=highPriority]
984 192.168.2.140	192.168.2.176	NGAP/NAS-5GS	720	2120	264		InitialContextSetupRequest, Service accept
056 192.168.2.176	192.168.2.140	NGAP	124	2120	264		InitialContextSetupResponse
793 192.168.2.176	192.168.2.140	NGAP/NAS-5GS	140	2120	264	100 (0x00000064)	UplinkNASTransport, Service request
803 192.168.2.176	192.168.2.140	NGAP/NAS-5GS	140	2120	264	100 (0x00000064)	UplinkNASTransport, Service request

#8 - 2025-03-04 17:02 - 徐红超

- 状态从进行中 变更为 转测试

该问题已在核心网版本Rel_3.3.2_pre1版本中修复

#9 - 2025-03-10 16:03 - 徐红超

- 指派给从徐红超 变更为 黄毅

#10 - 2025-03-11 09:40 - 黄毅

- 状态从转测试 变更为 已解决

文件

1.jpg 259 KB 2025-02-20 徐红超