

2.0基站产品化测试 - 错误 #2094

基站峰值灌包业务下终端vonr并切换，目标侧切换流程终端没回重配完成

2024-09-02 13:41 - 孙浩

| | | | |
|-----------|-------------|-----------|-------------------|
| 状态: | 挂起 | 开始日期: | 2024-09-02 |
| 优先级: | 普通 | 计划完成日期: | |
| 指派给: | 赵强 | % 完成: | 0% |
| 类别: | | 预期时间: | 0.00 小时 |
| 目标版本: | | 耗时: | 0.00 小时 |
| 问题归属: | CU | FPGA板卡类型: | 115P+PRU |
| 发现问题版本: | Rel_2.1.15P | CPU类型: | Xeon-gold5218(宝德) |
| 目标解决问题版本: | Rel_2.1.15P | | |

描述

【环境信息】：核心网 (Rel_3.2.2) +bbu(宝德服务器、Rel_2.1.15P_Pre1T4版本)+pru(3.5G)+yzmm (YZMM2.0.12Pre1T1)
【参数配置】：大上行子帧配比
【问题描述】：在Rel_2.1.15P_Pre1T4版本上，源基站接入2个手机，给其中1个手机上下行UDP峰值灌包，然后vonr语音，切换另1个终端到目标基站，此时的切换正常的，但是回切到源基站就有问题；
【问题频率】：必现
【问题影响】：产品性能
【问题分析】：回切到源基站，抓包分析，目标侧切换流程终端没回重配完成，需要cu进一步分析；

0902-70-1053.pcap

文件(F) 编辑(E) 视图(V) 跳转(G) 捕获(C) 分析(A) 统计(S) 电话(Y) 无线(W) 工具(T) 帮助(H)

| No. | Time | Source | Source f | Destination | Destin: | Protocol | C-RNTI | Info | DU-UE | CU-UE | measId | UE-NGAP |
|------|-----------------|---------------|----------|---------------|---------|-----------------|--------|--|-------|-------|---------|---------|
| 2057 | 10:58:57.284162 | 192.168.62.70 | 38473 | 192.168.62.70 | 38472 | F1AP/NR RRC | | ULRRCCMessageTransfer, Measurement Report MAC=0x12f18509 | 1 | 1 | | 2 |
| 2063 | 10:58:58.302200 | 192.168.62.70 | 38473 | 192.168.62.70 | 38472 | F1AP/NR RRC | | ULRRCCMessageTransfer, Measurement Report MAC=0x39ab4373 | 1 | 1 | | 2 |
| 2067 | 10:58:58.678892 | 192.168.62.40 | 38423 | 192.168.62.70 | 38422 | XnAP | | HandoverRequest, RRC Reconfiguration[Malformed Packet] | | | | |
| 2068 | 10:58:58.685306 | 192.168.62.70 | 38472 | 192.168.62.70 | 38473 | F1AP | | UEContextSetupRequest, RRC Reconfiguration | | 2 | | |
| 2069 | 10:58:58.689898 | 192.168.62.70 | 38473 | 192.168.62.70 | 38472 | F1AP | 17031 | UEContextSetupResponse | 2 | 2 | | |
| 2070 | 10:58:58.696740 | 192.168.62.70 | 38422 | 192.168.62.40 | 38423 | XnAP | | HandoverRequestAcknowledge, RRC Reconfiguration | | | 1,2,3,4 | |
| 2071 | 10:58:58.724015 | 192.168.62.40 | 38423 | 192.168.62.70 | 38422 | XnAP | | SNStatusTransfer | | | | |
| 2076 | 10:58:59.320640 | 192.168.62.70 | 38473 | 192.168.62.70 | 38472 | F1AP/NR RRC | | ULRRCCMessageTransfer, Measurement Report MAC=0x498b2ddc | 1 | 1 | | 2 |
| 2078 | 10:58:59.740793 | 192.168.62.70 | 38473 | 192.168.62.70 | 38472 | F1AP/NR RRC | 17039 | InitialULRRCCMessageTransfer, RRC Reestablishment Request | 3 | | | |
| 2079 | 10:58:59.741221 | 192.168.62.70 | 38472 | 192.168.62.70 | 38473 | F1AP/NR RRC | | DLRRCCMessageTransfer, RRC Reject | 3 | 3 | | |
| 2083 | 10:59:00.338728 | 192.168.62.70 | 38473 | 192.168.62.70 | 38472 | F1AP/NR RRC | | ULRRCCMessageTransfer, Measurement Report MAC=0xc17443fb | 1 | 1 | | 2 |
| 2085 | 10:59:00.680283 | 192.168.62.70 | 38472 | 192.168.62.70 | 38473 | F1AP | | UEContextReleaseCommand | 2 | 2 | | |
| 2086 | 10:59:00.680617 | 192.168.62.70 | 38473 | 192.168.62.70 | 38472 | F1AP | | UEContextReleaseComplete | 2 | 2 | | |
| 2087 | 10:59:00.818325 | 192.168.62.70 | 38473 | 192.168.62.70 | 38472 | F1AP/NR RRC | 17040 | InitialULRRCCMessageTransfer, RRC Setup Request | 4 | | | |
| 2089 | 10:59:00.819622 | 192.168.62.70 | 38472 | 192.168.62.70 | 38473 | F1AP/NR RRC | | DLRRCCMessageTransfer, RRC Setup | 4 | 4 | | |
| 2090 | 10:59:00.875654 | 192.168.62.70 | 38473 | 192.168.62.70 | 38472 | F1AP/NR RRC/... | | ULRRCCMessageTransfer, RRC Setup Complete, Registration reque... | 4 | 4 | | |

相关的问题:

关联到 2.0基站产品化测试 - 需求CR #1847: 关于Qos保障需求的支持 挂起 2024-06-04

历史记录

#1 - 2024-09-02 13:42 - 孙浩

- 指派给 被设置为 席振斌

#2 - 2024-09-03 09:11 - 孙浩

- 关联到 需求CR #1847: 关于Qos保障需求的支持 已添加

#3 - 2024-09-03 09:41 - 席振斌

- 状态从 新建 变更为 进行中

先让du分析一下，在满灌包的情况下，重配置完成这个信令终端有没有发上来

#4 - 2024-09-04 10:07 - 席振斌

- 指派给从 席振斌 变更为 匿名用户

#5 - 2024-09-04 10:10 - 匿名用户

- 指派给从 匿名用户 变更为 席振斌

从du日志查看，rnti为17031的终端，源侧重配置下发无误，但目标侧未收到重配置完成(目标侧的17031终端第一条上行数据)

#6 - 2024-09-24 09:48 - 席振斌

后续复现后立伟哥进行过分析，从du侧的日志显示，是基站侧没有解对上行数据帧，可能是因为重配置完成底层没解对被丢弃了，导致没到达高层，目前du没时间看

#7 - 2024-10-15 10:22 - 席振斌

- 指派给从席振斌变更为匿名用户

#8 - 2024-11-19 16:43 - 匿名用户

待T5版本复现，取最新log定位

#9 - 2024-11-29 10:25 - 孙浩

- 文件#2094问题单复现日志-1129.z01 已添加
- 文件#2094问题单复现日志-1129.z02 已添加
- 文件#2094问题单复现日志-1129.zip 已添加
- 文件 抓包日志.jpg 已添加

基于2.1.15ppreT5版本（11月20号出）再次复现此场景，vonn中切换回源基站出现没回重复配完成消息的场景，du与cu继续配合定位；

1129-40-1000.pcap

文件(F) 编辑(E) 视图(V) 跳转(G) 捕获(C) 分析(A) 统计(S) 电话(V) 无线(W) 工具(T) 帮助(H)

flap || ngap || sdap || nr-rrc || xnap

| No. | Time | Source | Source p | Destination | Destin: | Protocol | C-RNTI | Info | DU-UE | CU-UE | UE-NGAP | measId |
|------|-----------------|---------------|----------|---------------|---------|-------------|--------|--|-------|-------|---------|--------|
| 1996 | 10:07:53.299141 | 192.168.62.40 | 38423 | 192.168.62.70 | 38423 | XnAP | | HandoverRequest, RRC Reconfiguration[Malformed Packet] | | | | |
| 1997 | 10:07:53.322414 | 192.168.62.70 | 38422 | 192.168.62.40 | 38423 | XnAP | | HandoverRequestAcknowledge, RRC Reconfiguration | | | | 1,2,3 |
| 1998 | 10:07:53.328526 | 192.168.62.40 | 38472 | 192.168.62.40 | 38473 | FIAP/NR RRC | | UEContextModificationRequest, RRC Reconfiguration MAC=0xced1657f | 0 | 0 | | 1,2,3 |
| 1999 | 10:07:53.340306 | 192.168.62.40 | 38473 | 192.168.62.40 | 38472 | FIAP | | UEContextModificationResponse | 0 | 0 | | |
| 2000 | 10:07:53.341107 | 192.168.62.40 | 38423 | 192.168.62.70 | 38422 | XnAP | | SNStatusTransfer | | | | |
| 2003 | 10:07:53.642549 | 192.168.62.70 | 38422 | 192.168.62.40 | 38423 | XnAP | | UEContextRelease | | | | |
| 2004 | 10:07:53.643521 | 192.168.62.40 | 38472 | 192.168.62.40 | 38473 | FIAP | | UEContextReleaseCommand | 0 | 0 | | |
| 2005 | 10:07:53.643643 | 192.168.62.40 | 38473 | 192.168.62.40 | 38472 | FIAP | | UEContextReleaseComplete | 0 | 0 | | |
| 2156 | 10:08:31.683581 | 192.168.62.70 | 38423 | 192.168.62.40 | 38422 | XnAP | | HandoverRequest, RRC Reconfiguration[Malformed Packet] | | | | |
| 2157 | 10:08:31.690856 | 192.168.62.40 | 38472 | 192.168.62.40 | 38473 | FIAP | | UEContextSetupRequest, RRC Reconfiguration | | 2 | | |
| 2158 | 10:08:31.695979 | 192.168.62.40 | 38473 | 192.168.62.40 | 38472 | FIAP | 17019 | UEContextSetupResponse | 2 | 2 | | |
| 2159 | 10:08:31.701177 | 192.168.62.40 | 38422 | 192.168.62.70 | 38423 | XnAP | | HandoverRequestAcknowledge, RRC Reconfiguration | | | | 1,2,3 |
| 2160 | 10:08:31.719747 | 192.168.62.70 | 38423 | 192.168.62.40 | 38422 | XnAP | | SNStatusTransfer | | | | |
| 2165 | 10:08:32.827126 | 192.168.62.40 | 38473 | 192.168.62.40 | 38472 | FIAP/NR RRC | 17027 | InitialULRRCCMessageTransfer, RRC Reestablishment Request | 3 | | | |
| 2166 | 10:08:32.827675 | 192.168.62.40 | 38472 | 192.168.62.40 | 38473 | FIAP/NR RRC | | DLRRCCMessageTransfer, RRC Reject | 3 | 3 | | |
| 2167 | 10:08:32.827708 | 192.168.62.40 | 38472 | 192.168.62.40 | 38473 | FIAP | | UEContextReleaseCommand | 3 | 3 | | |
| 2169 | 10:08:32.828128 | 192.168.62.40 | 38473 | 192.168.62.40 | 38472 | FIAP | | UEContextReleaseComplete | 3 | 3 | | |

#10 - 2024-11-29 16:49 - 匿名用户

- 文件 image.jpg 已添加

查看切换失败的目标测报文，发现目标测基站未收到msg1(未发起专用随机接入)；分析可能是源测的重配置下发存在问题，查看源测日志后发现，17017的UE重配置信令新传反馈是DTX，重传反馈是NACK；待与PHY进一步分析该问题。

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95308 11-29 10:08:31.721 [DBG_26]kwU1SndStaRsp: ue[17017] rBId[1] lCId[1] boRptIdx[128] boRpt[499] sduCnt[1]
95309 11-29 10:08:31.721 [DBG_26]process_trans_event: msg_type[159]
95310 11-29 10:08:31.721 [DBG_26]process_ue_reset_req: ue[17017] RB[1] flw_report_count[1]
95311 11-29 10:08:31.721 [DBG_26]txrg_flw_ctrl_info_req: ue[17017] RB[1] rBType[1]
95312 11-29 10:08:31.721 [DBG_26]process_flw_ctrl_info_req: ue[17017] RB[2] flw_report_count[2]
95313 11-29 10:08:31.721 [DBG_26]txrg_flw_ctrl_info_req: ue[17017] RB[2] rBType[1]
95314 11-29 10:08:31.721 [DBG_26]process_ue_reset_req: ue[17017] RB[3] flw_report_count[3]
95315 11-29 10:08:31.721 [DBG_26]txrg_flw_ctrl_info_req: ue[17017] RB[3] rBType[1]
95316 11-29 10:08:31.721 [DBG_26]kwHdlFlwCtrlInfoReq: ue[17017] RB[1] lCId[1] boRptIdx[128] boRpt[499] sduCnt[1]
95317 11-29 10:08:31.721 [DBG_26]kwHdlFlwCtrlInfoReq: ue[17017] RB[1] lCId[1] boRptIdx[128] boRpt[499] sduCnt[1]
95318 11-29 10:08:31.721 [DBG_26]kwHdlFlwCtrlInfoReq: ue[17017] RB[1] lCId[1] boRptIdx[128] boRpt[499] sduCnt[1]
95319 11-29 10:08:31.721 [DBG_26]process_flw_ctrl_info: ue[17017] RB[1] flw_report_count[2]
95320 11-29 10:08:31.721 [DBG_26]process_flw_ctrl_info: ue[17017] RB[2] flw_report_count[1]
95321 11-29 10:08:31.721 [DBG_26]process_flw_ctrl_info: ue[17017] RB[3] flw_report_count[0]
95322 11-29 10:08:31.721 [DBG_26]process_trans_event: msg_type[172]
95323 11-29 10:08:31.721 [DBG_26]gUeCb_del: kwU1SndStaRsp: ue[17017] rBId[1] lCId[1] boRptIdx[128] boRpt[499] sduCnt[1]
95324 11-29 10:08:31.721 [DBG_26]gUeCb_del: kwHdlUICkUeCfReq[17017:4]
95325 11-29 10:08:31.721 [DBG_26]kwCfgrReEstRb: ue[17017] rBId[1] lCId[1] boRptIdx[128] boRpt[499] sduCnt[1]
95326 11-29 10:08:31.721 [DBG_26]gUeCb_del: kwHdlUICkUeCfReq[17017:4]
95327 11-29 10:08:31.721 [DBG_26]kwCfgrReEstRb: ue[17017] rBId[2] lCId[2] boRptIdx[129] boRpt[500] sduCnt[2]
95328 11-29 10:08:31.721 [DBG_26]gUeCb_del: kwHdlUICkUeCfReq[17017:4]
95329 11-29 10:08:31.721 [DBG_26]kwCfgrReEstRb: ue[17017] rBId[3] lCId[3] boRptIdx[130] boRpt[501] sduCnt[3]
95330 11-29 10:08:31.721 [DBG_26]gUeCb_del: kwU1SndStaRsp: ue[17017] rBId[1] lCId[1] boRptIdx[128] boRpt[499] sduCnt[1]
95331 11-29 10:08:31.721 [DBG_26]gUeCb_del: kwU1SndStaRsp: ue[17017] rBId[1] lCId[1] boRptIdx[128] boRpt[499] sduCnt[1]
95332 11-29 10:08:31.721 [DBG_26]kwCfgrReEstRb: ue[17017] rBId[1] lCId[1] boRptIdx[128] boRpt[499] sduCnt[1]
95333 11-29 10:08:31.721 [DBG_26]kwCfgrReEstRb: ue[17017] rBId[1] lCId[1] boRptIdx[128] boRpt[499] sduCnt[1]
95334 11-29 10:08:31.721 [DBG_26]gUeCb_del: kwU1SndStaRsp: ue[17017] rBId[1] lCId[1] boRptIdx[128] boRpt[499] sduCnt[1]
95335 11-29 10:08:31.721 [DBG_26]kwCfgrReEstRb: ue[17017] rBId[1] lCId[1] boRptIdx[128] boRpt[499] sduCnt[1]
95336 11-29 10:08:31.721 [DBG_26]kwCfgrReEstRb: ue[17017] rBId[1] lCId[1] boRptIdx[128] boRpt[499] sduCnt[1]
95337 11-29 10:08:31.721 [DBG_26]gUeCb_del: kwHdlUICkUeCfReq[17017:4]
95338 11-29 10:08:31.721 [DBG_26]kwCfgrReEstRb: ue[17017] rBId[1] lCId[1] boRptIdx[128] boRpt[499] sduCnt[1]
95339 11-29 10:08:31.721 [DBG_26]gUeCb_del: kwU1SndStaRsp: ue[17017] rBId[1] lCId[1] boRptIdx[128] boRpt[499] sduCnt[1]
95340 11-29 10:08:31.721 [DBG_26]gUeCb_del: kwU1SndStaRsp: ue[17017] rBId[1] lCId[1] boRptIdx[128] boRpt[499] sduCnt[1]
95341 11-29 10:08:31.721 [DBG_26]gUeCb_del: kwU1SndStaRsp: ue[17017] rBId[1] lCId[1] boRptIdx[128] boRpt[499] sduCnt[1]
95342 11-29 10:08:31.721 [DBG_26]gUeCb_del: kwU1SndStaRsp: ue[17017] rBId[1] lCId[1] boRptIdx[128] boRpt[499] sduCnt[1]
95343 11-29 10:08:31.721 [DBG_26]gUeCb_del: kwU1SndStaRsp: ue[17017] rBId[1] lCId[1] boRptIdx[128] boRpt[499] sduCnt[1]
95344 11-29 10:08:31.721 [DBG_26]gUeCb_del: kwU1SndStaRsp: ue[17017] rBId[1] lCId[1] boRptIdx[128] boRpt[499] sduCnt[1]

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ind result - (2299 hits)
Line 95237: [11-29 10:08:31.698] [DBG_07]rgSCHDmFrcFdbkFcrTb: rnti[17017] harqId[14] imcs[13] rbStart[0] rbNum[1] tBSize[63] Ack/Nack[1] txCnt[2] rv[2] crntTime[745 0] pdsch[744 11] pucch[744 19]
Line 95254: [11-29 10:08:31.707] [DBG_07]rgSCHDmFrcFdbkFcrTb: rnti[17017] harqId[15] imcs[12] rbStart[0] rbNum[1] tBSize[57] Ack/Nack[1] txCnt[1] rv[0] crntTime[745 19] pdsch[745 10] pucch[745 18]
Line 95294: [11-29 10:08:31.717] [DBG_07]rgSCHDmFrcFdbkFcrTb: rnti[17017] harqId[5] imcs[12] rbStart[0] rbNum[2] tBSize[111] Ack/Nack[0] txCnt[1] rv[0] crntTime[746 10] pdsch[746 10] pucch[746 18]
Line 95365: [11-29 10:08:31.727] [DBG_07]rgSCHDmFrcFdbkFcrTb: rnti[17017] harqId[5] imcs[12] rbStart[0] rbNum[2] tBSize[111] Ack/Nack[0] txCnt[1] rv[0] crntTime[746 10] pdsch[746 10] pucch[746 18]
Line 95415: [11-29 10:08:31.731] [DBG_07]rgSCHDmFrcFdbkFcrTb: rnti[17017] harqId[12] imcs[11] rbStart[0] rbNum[1] tBSize[528] Ack/Nack[2] txCnt[3] rv[3] crntTime[748 13] pdsch[748 0] pucch[748 8]
Line 95432: [11-29 10:08:31.737] [DBG_07]rgSCHDmFrcFdbkFcrTb: rnti[17017] harqId[1] imcs[11] rbStart[0] rbNum[1] tBSize[498] Ack/Nack[1] txCnt[1] rv[0] crntTime[748 19] pdsch[748 10] pucch[748 18]
Line 95434: [11-29 10:08:31.737] [DBG_07]rgSCHDmFrcFdbkFcrTb: rnti[17017] harqId[5] imcs[12] rbStart[0] rbNum[2] tBSize[111] Ack/Nack[0] txCnt[3] rv[3] crntTime[748 0] pdsch[748 11] pucch[748 18]
Line 95447: [11-29 10:08:31.742] [DBG_07]rgSCHDmFrcFdbkFcrTb: rnti[17017] harqId[12] imcs[11] rbStart[0] rbNum[1] tBSize[528] Ack/Nack[0] txCnt[2] rv[2] crntTime[749 5] pdsch[749 0] pucch[749 8]
Line 95460: [11-29 10:08:31.747] [DBG_07]rgSCHDmFrcFdbkFcrTb: rnti[17017] harqId[5] imcs[12] rbStart[0] rbNum[2] tBSize[111] Ack/Nack[0] txCnt[4] rv[1] crntTime[749 19] pdsch[749 10] pucch[749 18]
Line 95477: [11-29 10:08:31.757] [DBG_07]rgSCHDmFrcFdbkFcrTb: rnti[17017] harqId[12] imcs[11] rbStart[0] rbNum[1] tBSize[528] Ack/Nack[0] txCnt[3] rv[3] crntTime[751 0] pdsch[750 11] pucch[750 18]
Line 95501: [11-29 10:08:31.767] [DBG_07]rgSCHDmFrcFdbkFcrTb: rnti[17017] harqId[12] imcs[11] rbStart[0] rbNum[1] tBSize[528] Ack/Nack[0] txCnt[4] rv[1] crntTime[751 19] pdsch[751 10] pucch[751 18]
Line 95527: [11-29 10:08:31.777] [DBG_07]rgSCHDmFrcFdbkFcrTb: rnti[17017] harqId[2] imcs[11] rbStart[0] rbNum[1] tBSize[498] Ack/Nack[1] txCnt[1] rv[0] crntTime[752 19] pdsch[752 10] pucch[752 18]
Line 95558: [11-29 10:08:31.817] [DBG_07]rgSCHDmFrcFdbkFcrTb: rnti[17017] harqId[0] imcs[10] rbStart[0] rbNum[1] tBSize[44] Ack/Nack[1] txCnt[1] rv[0] crntTime[756 19] pdsch[756 10] pucch[756 18]
Line 95596: [11-29 10:08:31.857] [DBG_07]rgSCHDmFrcFdbkFcrTb: rnti[17017] harqId[3] imcs[10] rbStart[0] rbNum[1] tBSize[44] Ack/Nack[1] txCnt[1] rv[0] crntTime[761 0] pdsch[760 10] pucch[760 18]

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#11 - 2024-12-02 16:00 - 匿名用户

- 文件 iJnLjMv6CW.jpg 已添加

重新复现后现象与上述相同，源测的置信命令UE解不对，PUCCCH上的反馈都是错

源测重配置信令的大小是499, 反馈全错

#12 - 2024-12-03 21:00 - 匿名用户

- 指派给从匿名用户变更为赵强

需要PHY同事分析PUCCCH解错原因

#13 - 2024-12-06 14:58 - 赵强

- 状态从进行中变更为挂起

文件

| | | | |
|-----------------------------|---------|------------|------|
| 抓包截图.jpg | 376 KB | 2024-09-02 | 孙浩 |
| 基站峰值灌包时vonn并切换流程异常-0902.rar | 44.1 MB | 2024-09-02 | 孙浩 |
| #2094问题单复现日志-1129.z01 | 100 MB | 2024-11-29 | 孙浩 |
| #2094问题单复现日志-1129.z02 | 100 MB | 2024-11-29 | 孙浩 |
| 抓包日志.jpg | 353 KB | 2024-11-29 | 孙浩 |
| #2094问题单复现日志-1129.zip | 62.2 MB | 2024-11-29 | 孙浩 |
| image.jpg | 1.02 MB | 2024-11-29 | 匿名用户 |
| iJnLjMv6CW.jpg | 1.49 MB | 2024-12-02 | 匿名用户 |