

2.0基站产品化测试 - 需求CR #1696

需要减少500UE时的测量报告

2024-04-11 14:27 - 杨杨乐

状态:	转测试	开始日期:	2024-04-11
优先级:	普通	计划完成日期:	
指派给:	周磊	% 完成:	0%
类别:	需求	预期时间:	0.00 小时
目标版本:		耗时:	0.00 小时
问题归属:	CU	CPU类型:	
目标解决问题版本:	Rel_2.1.15P		
描述			

历史记录

#1 - 2024-04-11 14:27 - 杨杨乐

- 状态从新建变更为进行中

#2 - 2024-05-10 11:29 - 席振斌

- 指派给从杨杨乐变更为席振斌

目前cu通过代码模拟了500ue测量上报的情况，需要先评估500ue时在周期测量上报和事件上报都进行的时候能否支撑，目前是待自测状态

#3 - 2024-05-13 10:36 - 席振斌

通过循环500次模拟500ue的方式不可行，因为相同的sn会被pdcp层的处理阻挡，现在考虑通过计算出处理每一次测量上报的时间来预估

#4 - 2024-05-14 19:32 - 席振斌

- 文件 20240507-152322.jpg 已添加

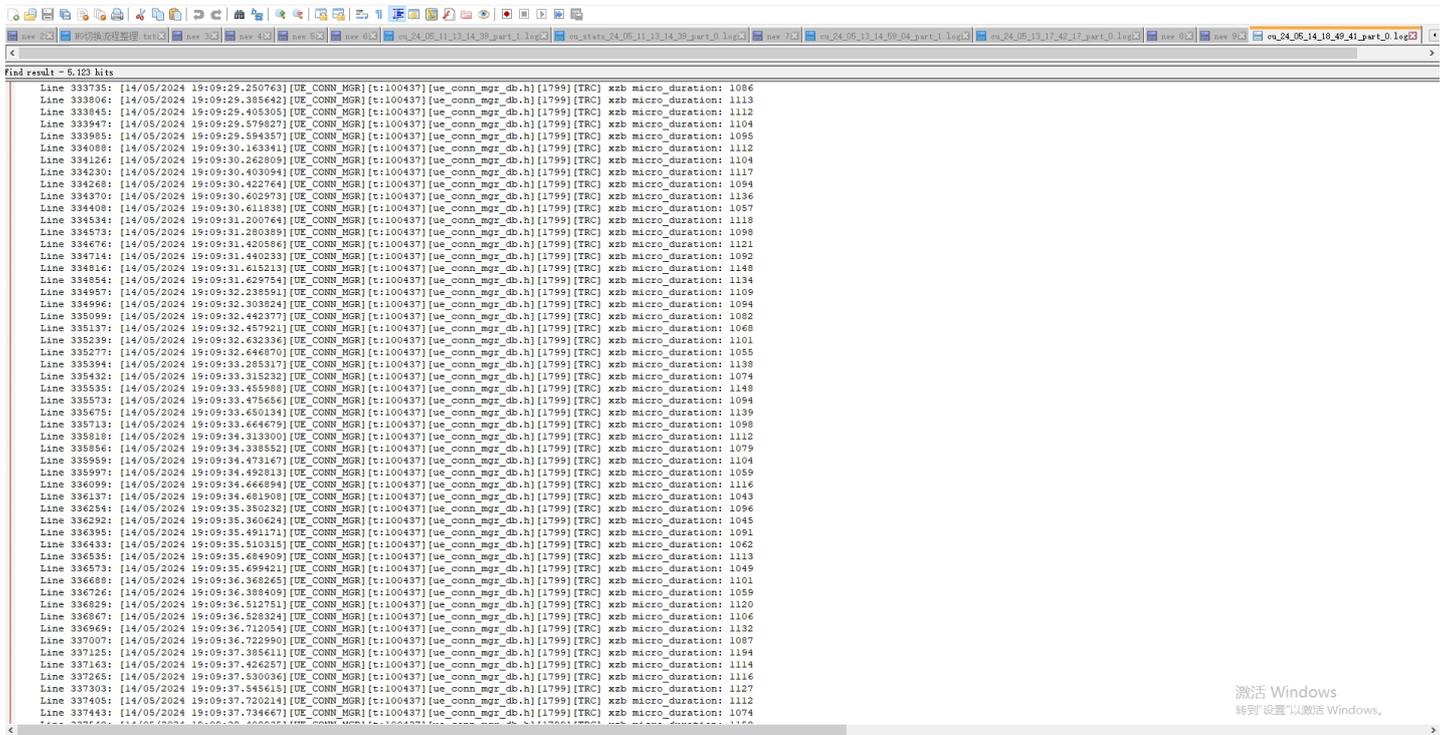
#5 - 2024-05-14 19:36 - 席振斌

- 文件 20240514-192646.jpg 已添加

- 文件 cu_24_05_14_18_49_41_part_0.log 已添加

接了6个终端，5个下行灌包20m，

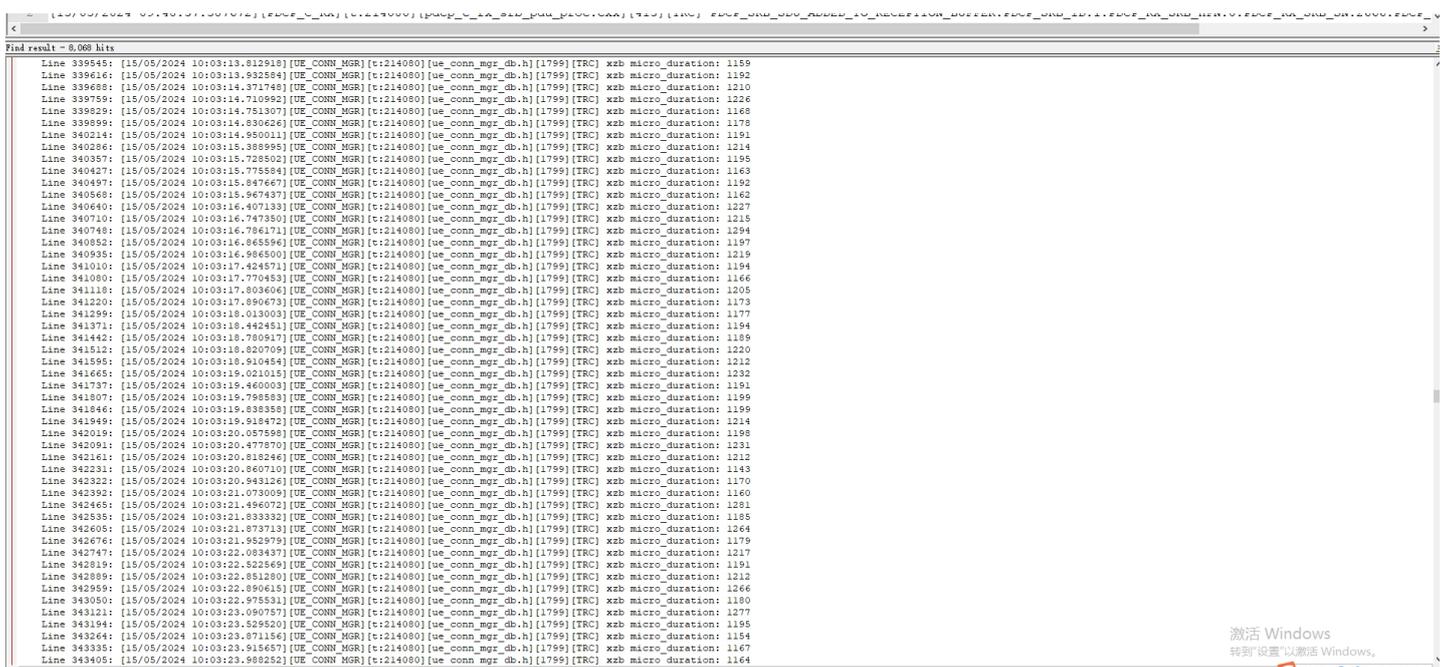
1个下行灌包10m，周期测量上报为1024ms,通过打印的计算每一帧测量上报的处理时长来看，在这种场景下每一帧测量上报的处理时长为1.1ms。



图片中的时间段的单位为微秒

#6 - 2024-05-16 16:16 - 席振斌

- 文件 20240516-152217.jpg 已添加



场景为5个终端，大上行的环境，下行灌包总流量为100m，上行灌包总流量为120m；
周期测量上报的时间间隔为1024ms,从测试结果来看，每一帧测量上报消息的处理时间为1.2ms，预估到500ue就是600ms，600ms是小于时间间隔1024ms的，所以即使是500ue也是来得及处理的，而且我们的发布版本为周期测量上报的时间间隔为2048ms，但是在500ue的场景下cpu应该会很

#7 - 2024-05-16 16:22 - 席振斌

- 文件 20240516-162020.jpg 已添加

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1 [METADATA]
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Line 273920: [15/05/2024 11:06:16.223156] [UE_CONN_MGR] [c:132066] [ue_conn_mgr_db.h] [1799] [TRC] xzb micro_duration: 1135
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Line 274410: [15/05/2024 11:06:18.236681] [UE_CONN_MGR] [c:132066] [ue_conn_mgr_db.h] [1799] [TRC] xzb micro_duration: 1133
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Line 274900: [15/05/2024 11:06:20.241808] [UE_CONN_MGR] [c:132066] [ue_conn_mgr_db.h] [1799] [TRC] xzb micro_duration: 1175
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Line 278429: [15/05/2024 11:06:33.989880] [UE_CONN_MGR] [c:132066] [ue_conn_mgr_db.h] [1799] [TRC] xzb micro_duration: 1167
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场景为5个终端，大上行的环境，下行灌包总流量为100m，上行灌包总流量为120m；
 周期测量上报的时间间隔为2048ms,从测试结果来看，每一帧测量上报消息的处理时间为1.2ms，结果和间隔为1024ms一致

#8 - 2024-05-16 20:58 - 席振斌

- 文件 20240516-192505.jpg 已添加

	NUMA 0		SCTP_COREID		NUMA 0	
20	12	12	UL_THREAD_CORE_ID_LIST UDP_RX_UL_THREAD_CORE_ID_LIST	12	28	TIMER_THREAD_CORE_ID_LIST OAM_AGENT_THREAD_CORE_ID_LIST COMMON_CNTRL_THREAD_CORE_ID_LIST SCTP_CNTRL_THREAD_CORE_ID_LIST RM_THREAD_CORE_ID_LIST SCTP_SERVER_THREAD_CORE_ID_LIST UE_CNTRL_THREAD_CORE_ID_LIST SCTP_ING_CLIENT_THREAD_CORE_ID_LIST SCTP_XN_CLIENT_THREAD_CORE_ID_LIST BEARER_CNTRL_THREAD_CORE_ID_LIST SCTP_E1_CLIENT_THREAD_CORE_ID_LIST UDP_TX_DL_THREAD_CORE_ID_LIST UDP_TX_UL_THREAD_CORE_ID_LIST
21	13	13	wsRxThread wsWorkerThread wsUlcThread	13	29	DL_THREAD_CORE_ID_LIST

通过上面的测量结果来预估500ue的话，500ue的测量上报能够处理，测量上报的处理线程为UE_CTRL_THREAD和UL_THREAD/DL_THREAD所绑线程为一核，我们假设用户面的所绑线程cpu占用率达到100%（目前5终端峰值灌包看最高为60%那么UE_CTRL_THREAD线程的占用率为60%，那么如果除了500ue有新的终端接入的话，还有10%的cpu用来处理接入的消息处理，通过看接入的处理消息所用的时间最长的为2ms,还是可以支持50条消息

#9 - 2024-05-20 10:58 - 席振斌

转测试，等测试有实际的500ue环境了再实测一下

#10 - 2024-05-20 11:03 - 席振斌

- 状态从进行中变更为转测试

- 指派给从席振斌变更为周磊

文件

20240507-152322.jpg	81.8 KB	2024-05-14	席振斌
20240514-192646.jpg	1.17 MB	2024-05-14	席振斌
cu_24_05_14_18_49_41_part_0.log	57.9 MB	2024-05-14	席振斌
20240516-152217.jpg	909 KB	2024-05-16	席振斌
20240516-162020.jpg	1.16 MB	2024-05-16	席振斌
20240516-192505.jpg	145 KB	2024-05-16	席振斌