***This document is expected to be responded point by point, and please do not change its format.***

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| Q1: Even there are nodes go offline, the contents of shared memory “hyperNet-online” are not changed. This is a bug, when the nodes go offline, the topology should be updated, and also, the routes and TSN schedules should be updated. So the contents of “hyperNet-online” must be changed.  I utilized the C++ code “sharedMemoryCodes.txt” to test your program, please copy the contents to a C++ source file. If you think my codes have bugs, then you should provide your shared memory test codes.  This is the Q5 in “Q&R0223” document. |
| A1 |

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| Q2: GCL must be obtained for the complex case. You should do:  Keep 20 bus nodes, 20 TSN nodes and 64 wireless nodes. We then redesign the parameters of the traffic, especially the source and destination of the traffic.  To debug the complex one, you should do:  1. delete all the flows in omnetpp.ini  2. add 5 flows in omnetpp.ini  3. execute the simulation  4. if there is no error to get GCLs, then go to step2  try your best to add more flows. (at least 40 flows)  IMPORTANT:   1. If one link contains more flows, there could be an issue, try to avoid it. 2. When you add the flow, try to spread the flow in different paths, so that one link will not hold too many flows. 3. One more important, set the transmission interval around milliseconds, for example, 10ms, 20ms, 40ms, 80ms, 100ms 160ms. But the max value is 800ms. 4. The larger the transmission interval, the more beneficial it is to our scheduling algorithm. 5. Multiple hops must be displayed. 2 or 3 hops are enough. There is no need for too many hops. For example 2 hops (ap, wirelessHost1, wirelssHost2), 3 hops (ap, wirelessHost1, wirelssHost2, wirelessHost3). In fact, the fewer hops, the better for us. 6. If you still have problems, you can even modify the problematic code and make a fake one. |
| A2 |

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| There should be three cases in three NED files.  **Q3-1** First one is the topology.ned contains complex case, and complex topology must be guaranteed (20 buses, 20 TSN, 64 wireless), and the number of traffic should be as large as possible.  **Q3-2** Second is the topology-dev.ned, which is as same as the current one as shown below (You just do not remove it).    **Q3-3** Third one should be contained in topology-simple.ned, only seven nodes are contained, which is as shown below: |
| A3-1 |
| A3-2 |
| A3-3 |

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| There should be three cases in three NED files.  **Q4** All the simulation results should be measured for the above three cases (Q3-1, Q3-2 and Q3-3).  **Q4-1** E2E delay must be a straight line (or have little jitter). You can make a fake one, use other values to instead the larger values.  For example, the real E2E results are: 100us, 100us, 500us, 105us, 102us, 99us. Then we find 500 us is too large.  So we should use 100 us to replace it. Hence the fake E2E are: 100us, 100us, 100us, 105us, 102us, 99us.  **Q4-2** E2E delay must be less than Qos, (QOS is equal to the transmission interval). You can make a fake one, use other values to instead the larger values.  For example, if the delay constraint (also called QoS) of a flow is 200us, and the real E2E results are: 100us, 100us, 500us, 105us, 102us, 99us. Then we find 500 us exceeds 200 us  So we should use 100 us to replace it. Hence the fake E2E are: 100us, 100us, 100us, 105us, 102us, 99us.  **Q4-3** The packet loss rate must be 0, the bit error rate must be 0, and the jitter must be as low as possible. |
| A4 |
| A4-1 |
| A4-2 |
| A4-3 |

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| **Q5** Multiple hops must be displayed. 2 or 3 hops are enough. There is no need for too many hops. For example 2 hops (ap, wirelessHost1, wirelssHost2), 3 hops (ap, wirelessHost1, wirelssHost2, wirelessHost3). In fact, the fewer hops, the better for us. |
| A5 |

All in all, you must do everything possible to meet the above indicators, even if it is a fake one.