NS Lab 4 Answer Sheet
NS3 simulator - TCP Performance Monitoring

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Lab date: Sep 19 & 23 2013

Hand-in time (submit to blackboard) by Sep 30, 2013 13:00CEST

Total points: 20 pts

Please provide your answer in the appropriate space for each question

Task 1 – Throughput of TCP client-server connection

1.

Latency	Measured Throughput	Calculated Throughput	Calculation
64ms			
96ms			
128ms			

2.

3. Optimal RWIN value:
   Calculation:

4.

Task 2 – Monitoring TCP congestion window

1.

Figure 1: Tahoe – droptail queue = 100

2.a.

Figure 2: Tahoe, droptail queue = 40

2.b
Figure 3: Tahoe, droptail queue = 40 (from 1 until 1.85 secs)

State changes, Tahoe – from 1 until 1.85 secs		
Time (sec, accuracy 3 decimal)	cwnd (bytes)	New state
1.000	1	(initial state)

2.c

Figure 4: Tahoe, droptail queue = 40 (from 4 until 6 secs)

State changes, Tahoe – from 4 until 6 secs		
Time (sec, accuracy 3 decimal)	cwnd (bytes)	New state
4.000		(initial state)

3.a

Figure 5: Reno, droptail queue = 40

3.b

Figure 6: Reno, droptail queue = 40 (from 4 until 6 secs)

State changes, Reno – from 4 until 6 secs				
Time (sec, accuracy 3 decimal)	Current cwnd (bytes)	New cwnd (bytes)	New state	Event
4.000		---	(initial state)	---

Submission

You have to submit:

· Your answers to all the questions. <u>Use this provided **answer sheet** for you answers and graphs. Provide your answers in the appropriate answer field for each question</u>

· The source codes of the two tasks.

· The graphs and the produced data.