23.96,93.54 40.69.89.21 RCV SNO Tshark LIST CALLER Timeline Kandshake N1 | > Start Time 18:34:29,8501 29,8840 response 29,8842 29,9166 Handshake N2 29,9164 29,9502 In theory First Point Start response 29, 9516 Time 1 Should be before 29,9522 the time the 1st First Point 29,9836 packet is sent, (Connection) prefect 598 29,9918 however sending backets and 29,9919 Packet 599 30,0251 getting stats are d Separate threads 29,9919 Packet 600 app, so inthis example it's a 30,0251 bit later 30,0252 The actual 30,0252 First Point (Connection) 30,0254 ACK 1, N599 ACK 2,18694 30,0355-30,0574 244 probet 30,0575 menet has 30,0576 ACK HER I 30,0676 ACK HOW 2

SNA Getting Timeline for result ACV LST CALLER data srame 29,9522 T 29,9624 29,95227 Resuet 9 29, 9919 29, 9726 Timeline 6 59,9922 29, 9828+ Q-29,9919--00,0249-29, 9929-0 30,0021 30,0031 -30,0122 30,0133. We use sender timesoints to generate the result dataframe, so that the 1st and the last 59,9\$40-59,9820 data point are both 59,9841 sender datapoints. 59,9922---59,9943 (It's a point for further improvements if we 00,0045 Stats would, like to shift Dataframe nor stats by RTT/2 and see correlation With snd stats) Important Note: RCV statistics is statistics from the past. Ideally before joining Rev datasets with SNA datasets, we should shift RCV stats up by RTT/2. However, there are 2 problems here: 1. During the time RTT varies 2. We can calculate: -instial RTT from hand shakes exchange and shift datasets by RTInitial 12 as the first step under assumption that the experiment time - we can extract RTT estimation from tshark dump and shift Rev stats accordingly (requires additional research: 1. estimation accuracy; 2. What happens in time moments Where RYT changes diamatically?

Timeline for result data frame

-0 SND -- REV