

Mobile Computing (2h, KV)
WS 2018/19

Wireless Technologies and Systems
Mobile Communications and Positioning

Break-out Session

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Introduction: Performance Metrics

Throughput is the rate of successful data delivery

Measured in [bit/s]

Downlink / uplink throughput may differ

Latency (delay) is the time it takes to transmit data from one node to another

Measured in [s]

End-to-end delay is measured, careful: sometimes as a “round trip time (RTT)”

In-class Assignment (15' preparation, 15' presentation)

Measure latency and throughput

- Select **two scenarios**, e.g., two access networks or two different locations (campus, in lecture room, ... 3G, LTE, Wi-Fi at the campus) and use **speedtest.net** to **measure round trip time (RTT)** and **throughput (data rate)**
- Make sure to make a few **measurements** in a sequence (10 for each scenario) and present the statistics in class: (a) mean, (b) median, and (c) standard deviation.
- Which conclusions can you draw?

Create a short document with following structure:

- Describe the test setup: tool used (speedtest.net), scenarios, hardware
- Provide measurement results (e.g., use a table and graphs/figures)
- Write a conclusion (few sentences)