

Model 1 Measuring Your Network

Your network performance can be measured in two ways:

- **bandwidth** – the rate at which data is downloaded or uploaded to a network, measured in bits per second (bps), kilobits per second (kbps), or megabits per second (Mbps)
- **latency** – how much time it takes (in milliseconds) for a request to reach its destination

Questions (10 min)

Start time: _____

1. Consider how performance should be measured:

- a) For bandwidth, would good performance be a large number or a small number?
- b) For latency, would good performance be a large number or a small number?

2. Use an Internet speed test (<https://www.google.com/search?q=speed+test>) to measure bandwidth here on campus and later at home.

- a) On campus:
- b) At home:

3. Use Pingdom's speed test (<https://tools.pingdom.com/>) to measure the average latency between San Francisco and:

- a) <http://google.com>
- b) <http://whitehouse.gov>
- c) Any website you use

4. Search for "Internet speed by state" and "Internet speed by country" to find the interactive maps on fastmetrics.com.

- a) Which state in the US has the fastest **average peak speed**? Which state has the slowest?
- b) What is the difference between the fastest and slowest states?

c) Which country has the fastest **average speed**? How does the US compare?