C2SIM Server Throughput

- Open source server is a reference implementation
  - Single receive thread - not intended for high performance
  - Written in Java and includes debug & control features
  - Provides message translation for backward compatibility
- A major limiting factor is network latency
  - Round-trip time client to server
  - Data rate matters too, but not as much
  - REST transaction involves at least 3 client-server round trips
    - Should we change to persistent TCP connection?
- Ways to improve performance
  - Locate server to minimize overall client latency
  - Batch report send (multiple ReportContent in ReportBody)
  - Report send interval 30 sec or more (typical FFT?)
  - Systems that do not need reports do not subscribe in STOMP
    - Subscribe to only Initialization, Command, Order