NS2 Offline

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MAC 802.11

IEEE 802.11 standard, popularly known as WiFi, lays down the architecture and specifications of wireless LANs (WLANs). WiFi or WLAN uses high frequency radio waves instead of cables for connecting the devices in LAN. Users connected by WLANs can move around within the area of network coverage.

The 802.11 MAC sublayer provides an abstraction of the physical layer to the logical link control sublayer and upper layers of the OSI network. It is responsible for encapsulating frames and describing frame formats.

DSDV Routing Protocol

Destination-Sequenced Distance-Vector Routing (DSDV) is a table-driven routing scheme for ad hoc mobile networks based on the Bellman–Ford algorithm. Each entry in the routing table contains a sequence number, the sequence numbers are generally even if a link is present; else, an odd number is used. The number is generated by the destination, and the emitter needs to send out the next update with this number. Routing information is distributed between nodes by sending full dumps infrequently and smaller incremental updates more frequently.

UDP Agent

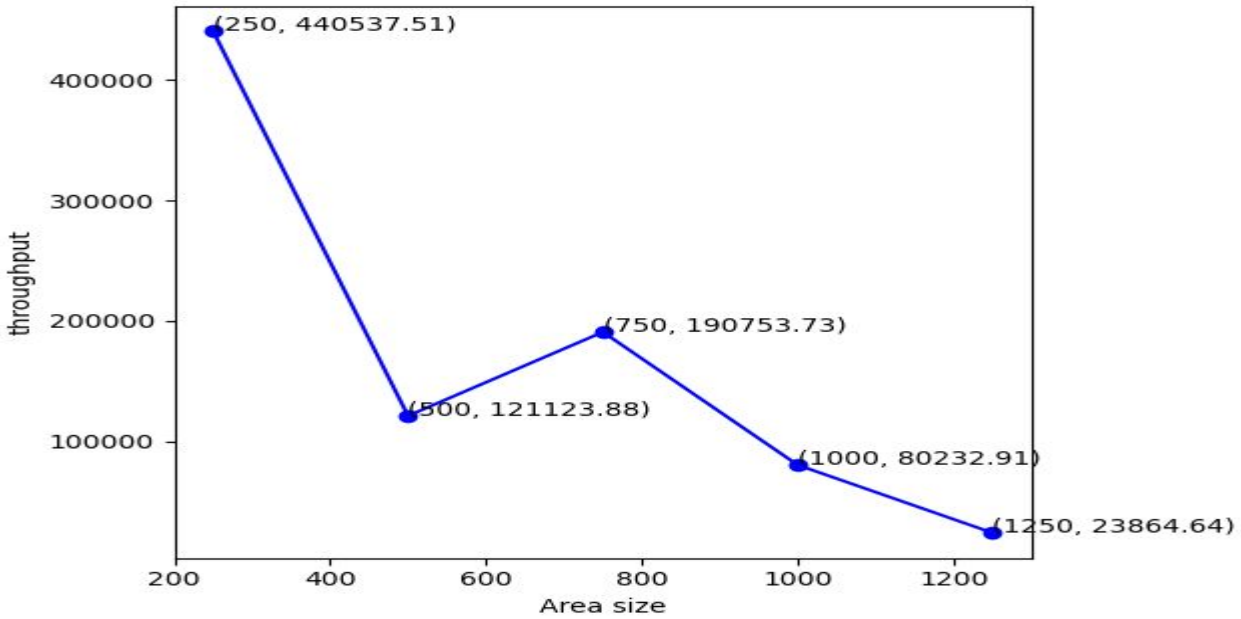
A UDP agent accepts data in variable size chunks from an application, and segments the data if needed. UDP packets also contain a monotonically increasing sequence number and an RTP timestamp. In UDP no acknowledgement is sent.

Exponential Traffic

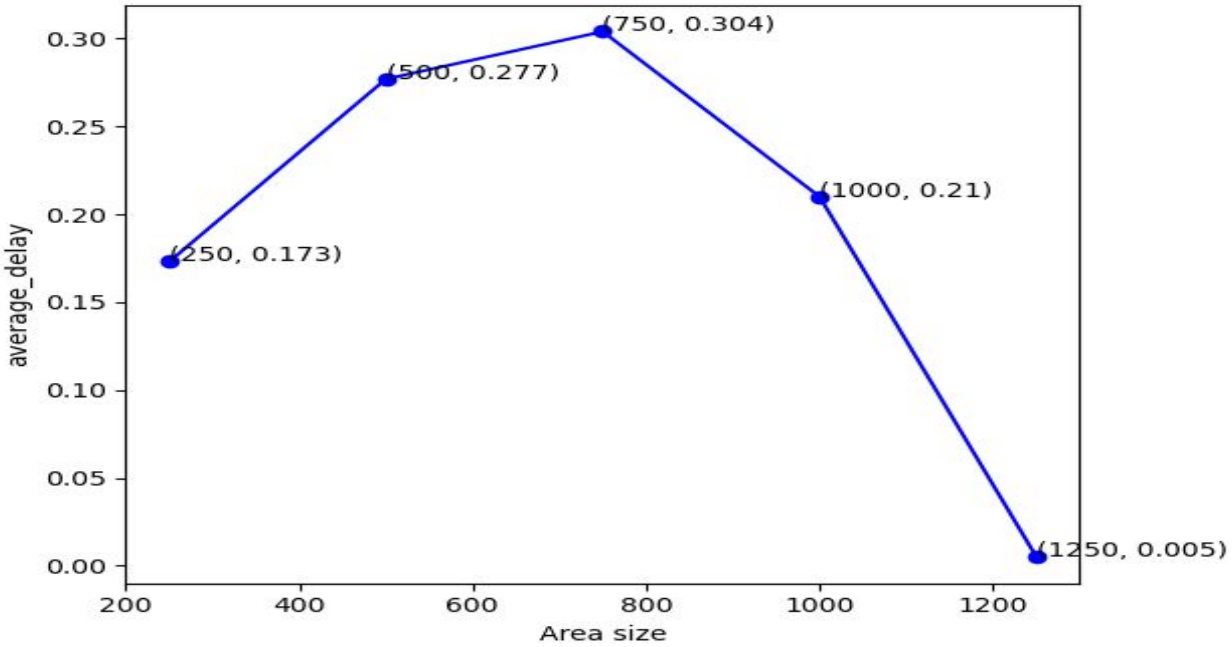
Generates traffic according to an Exponential On/Off distribution. Packets are sent at a fixed rate during on periods, and no packets are sent during off periods. Both on and off periods are taken from an exponential distribution. Packets are constant size.

Area_size vs Throughput

Throughput generally decreases as area increases.

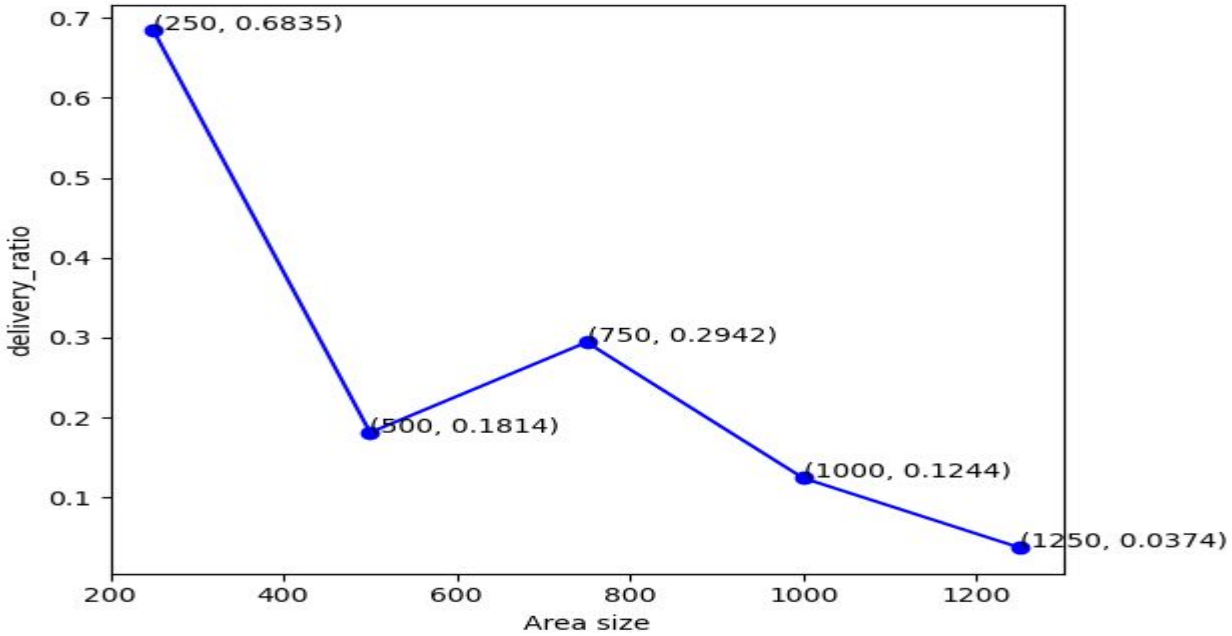


Area_size vs Average_delay



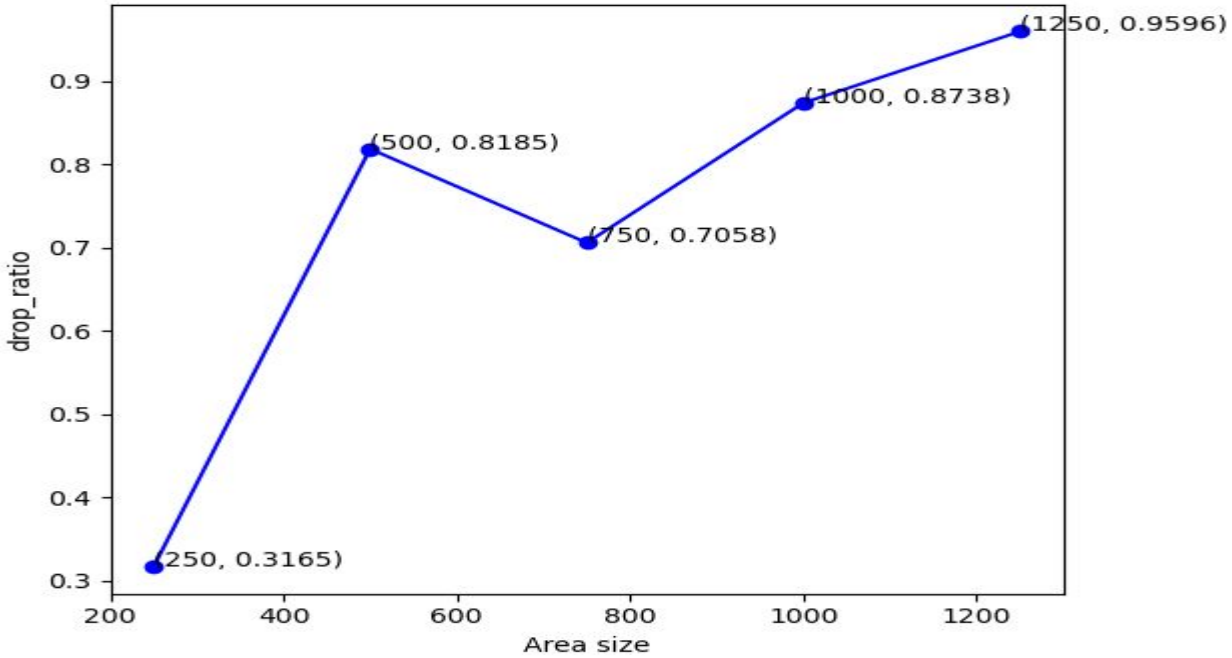
Area_size vs Delivery_ratio

As area increases delivery ratio generally decreases.

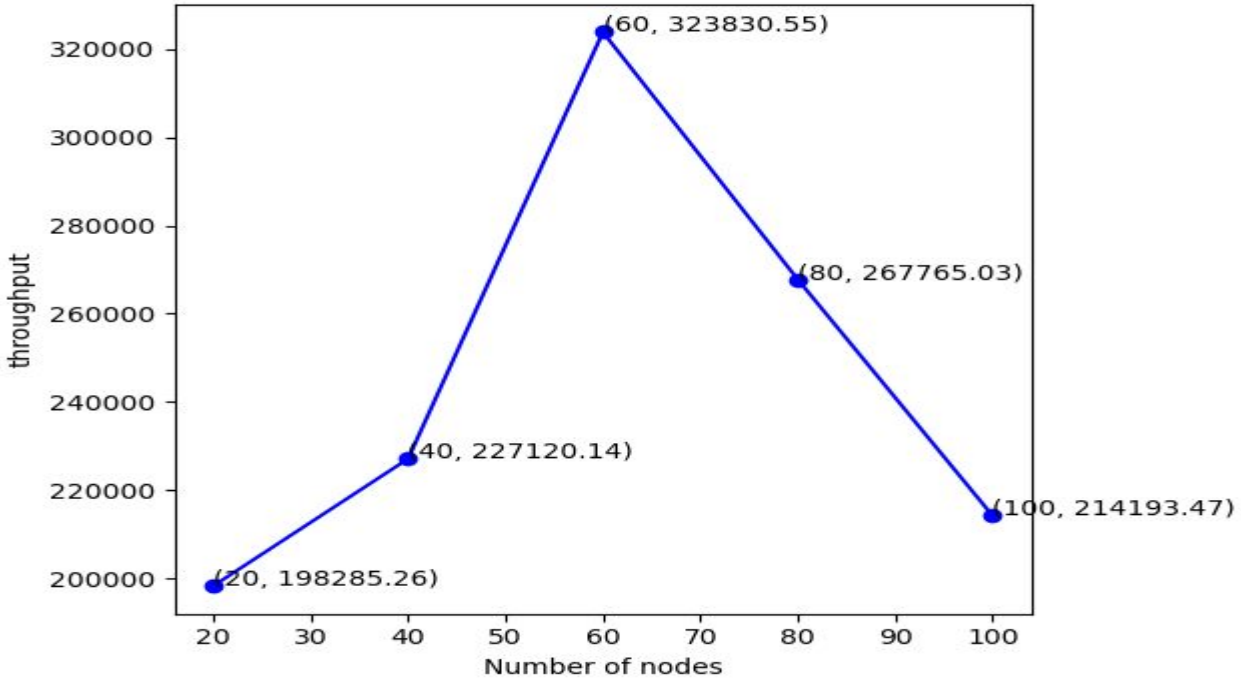


Area_size vs Drop_ratio

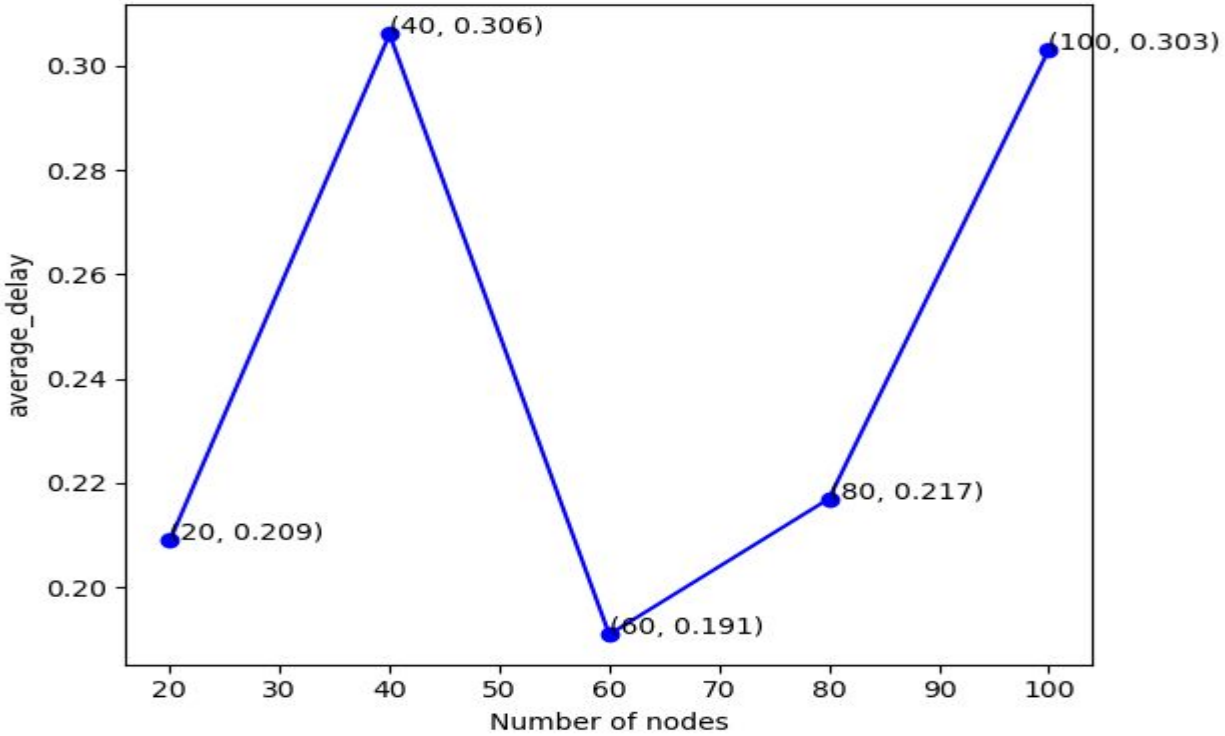
Drop ratio generally increases with area.



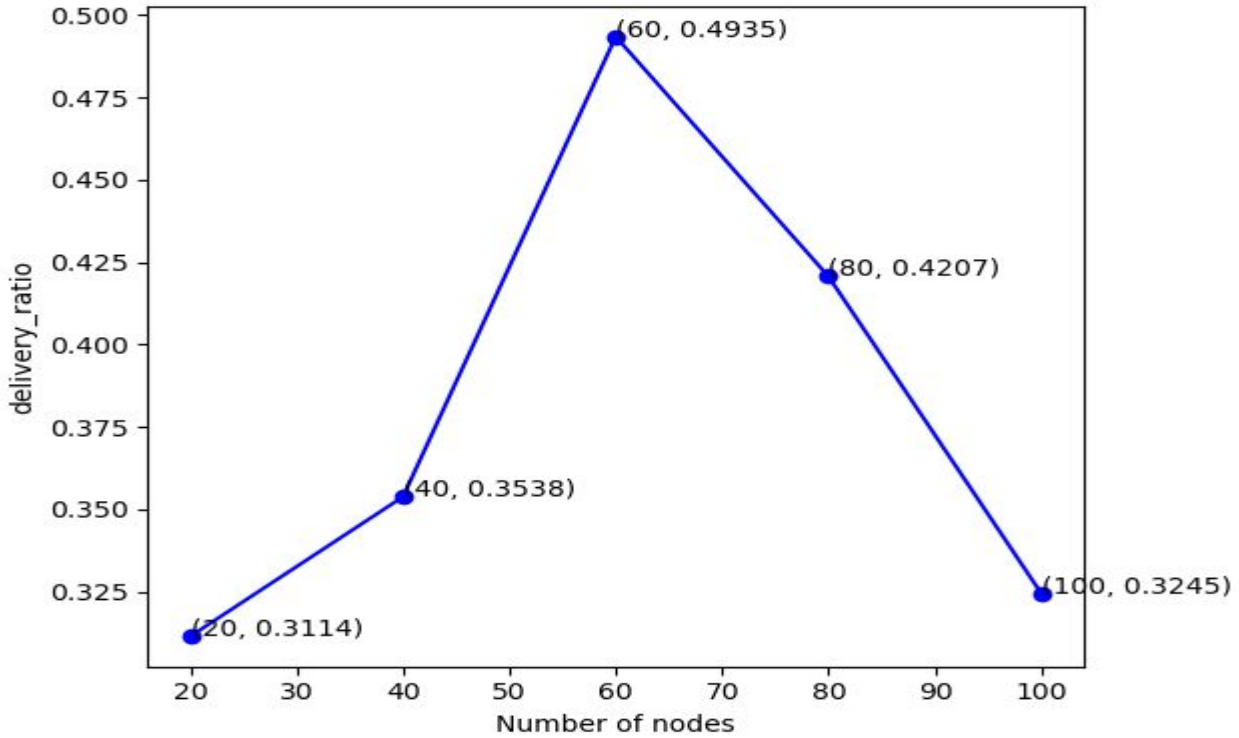
Number_of_nodes vs Throughput



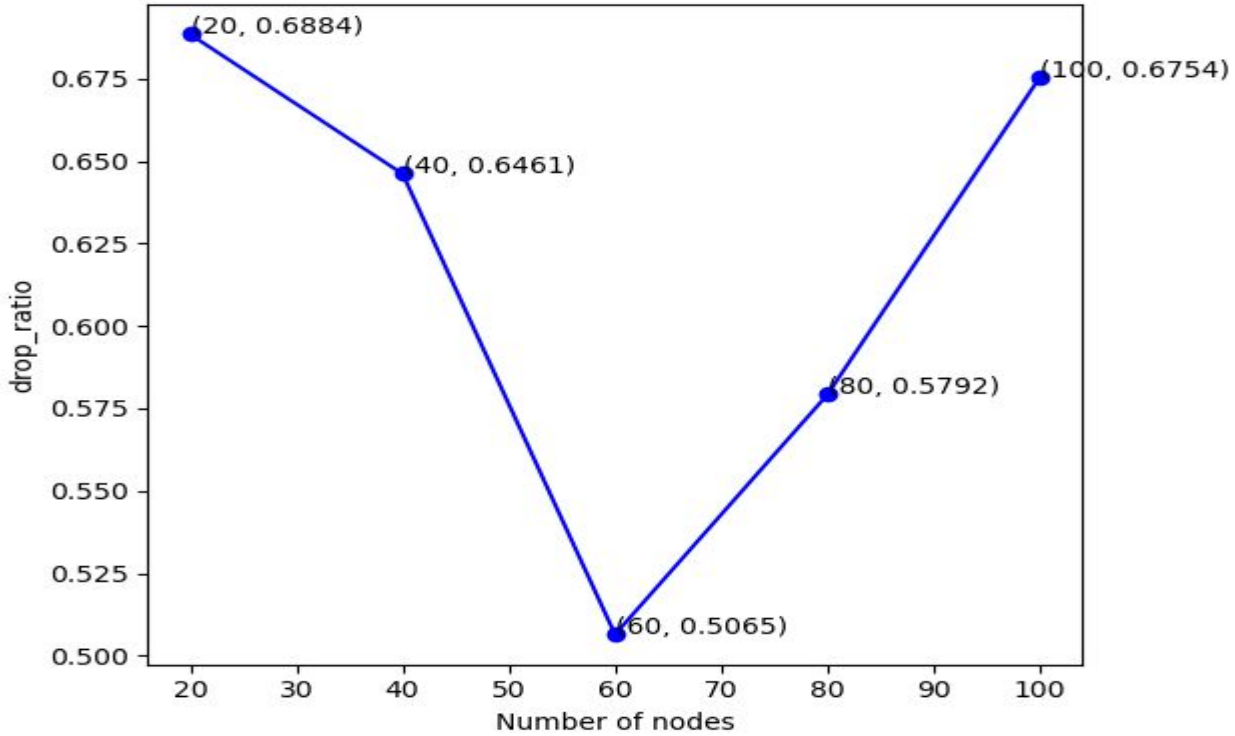
Number_of_nodes vs Average_delay



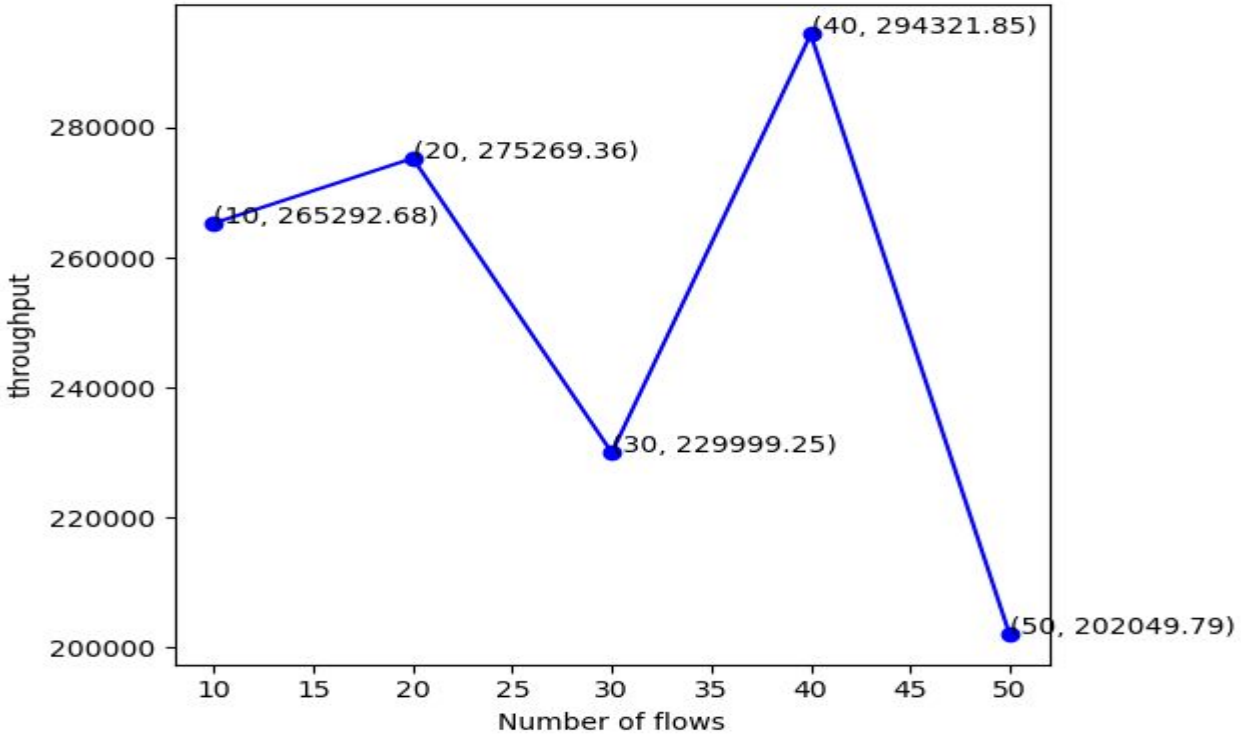
Number_of_nodes vs Delivery_ratio



Number_of_nodes vs Drop_ratio

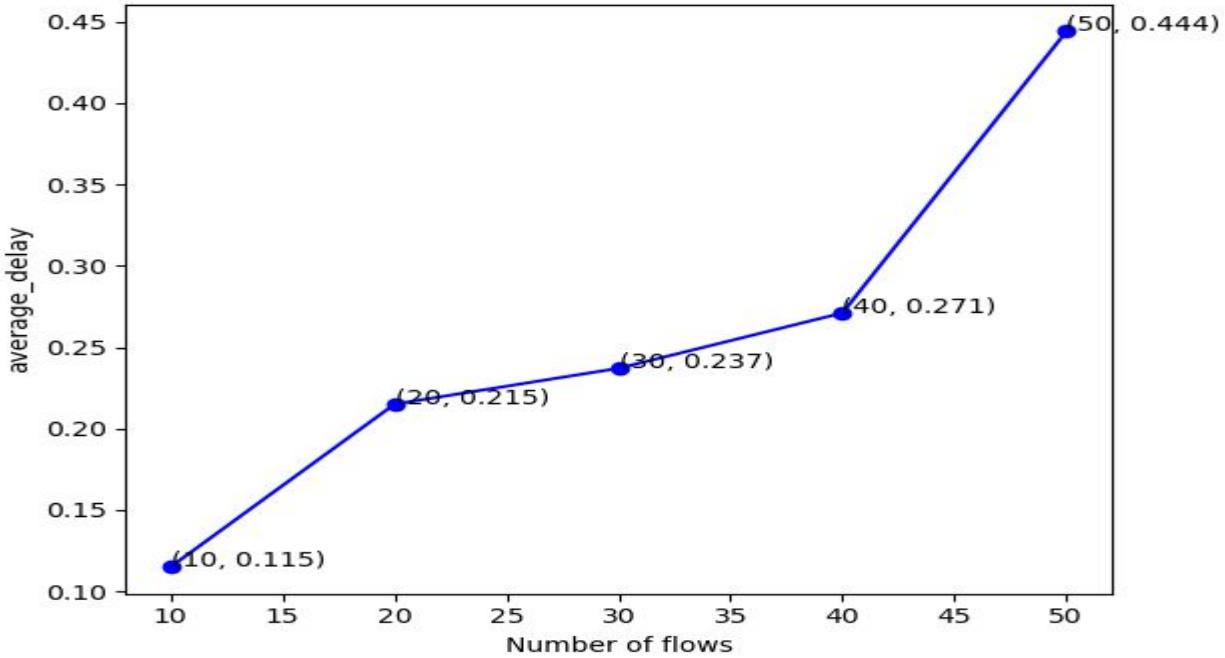


Number_of_flows vs Throughput



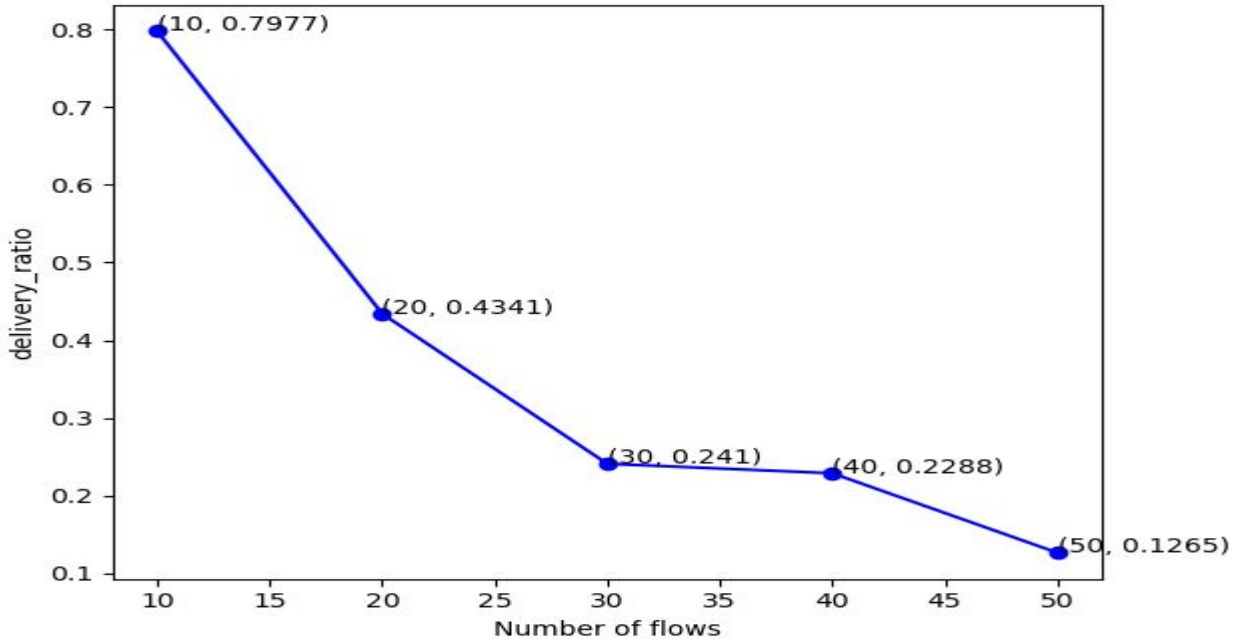
Number_of_flows vs Average_delay

Average delay increases as flow count increases.



Number_of_flows vs Delivery_ratio

Delivery ratio decreases as number of flow increases.



Number_of_flows vs Drop_ratio

Drop ratio increases as number of flow increases.