

```
Activities Terminal Jul 7 14:15 Sabaha Sadik
Sabaha Sadik Sabaha Sadik
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$^[[200~./ns3 build
bash: ./ns3: No such file or directory
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$-./ns3 build
bash: ~./ns3: No such file or directory
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$./ns3 shell
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$python3 examples/tutorial/first.py
AnimationInterface WARNING:Node:0 Does not have a mobility model. Use SetConstantPosition if it is stationary
AnimationInterface WARNING:Node:1 Does not have a mobility model. Use SetConstantPosition if it is stationary
AnimationInterface WARNING:Node:0 Does not have a mobility model. Use SetConstantPosition if it is stationary
AnimationInterface WARNING:Node:1 Does not have a mobility model. Use SetConstantPosition if it is stationary
At time +2s client sent 128 bytes to 10.1.1.2 port 9
At time +2.00225s server received 128 bytes from 10.1.1.1 port 49153
At time +2.00225s server sent 128 bytes to 10.1.1.1 port 49153
At time +2.00451s client received 128 bytes from 10.1.1.2 port 9
FlowID: 1 (UDP 10.1.1.1/49153 --> 10.1.1.2/9)
Tx Bytes: 156
Rx Bytes: 156
Tx Packets: 1
Rx Packets: 1
Lost Packets: 0
Mean Delay: 0.0022528
Throughput: 69.33333333333333
FlowID: 2 (UDP 10.1.1.2/9 --> 10.1.1.1/49153)
Tx Bytes: 156
Rx Bytes: 156
Tx Packets: 1
Rx Packets: 1
Lost Packets: 0
Mean Delay: 0.0022528
Throughput: 69.33333333333333
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$^
```

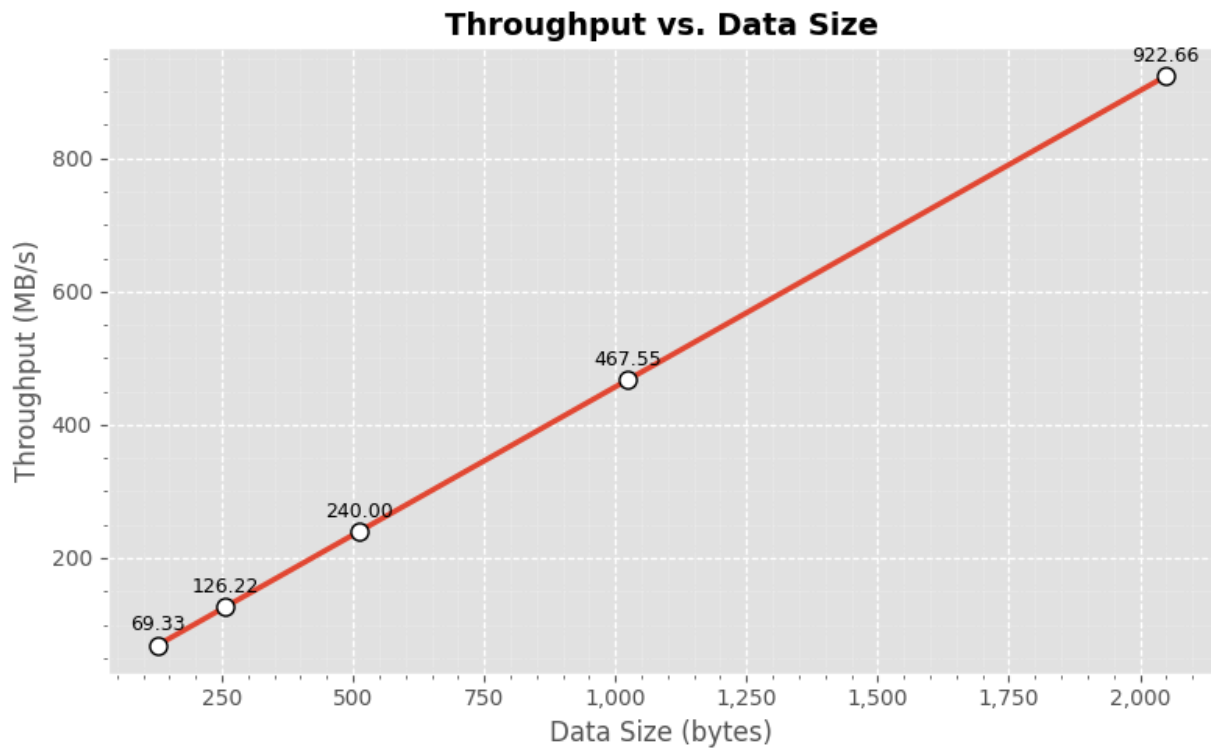
```
Activities Terminal Jul 7 14:16 Sabaha Sadik
Sabaha Sadik Sabaha Sadik
Lost Packets: 0
Mean Delay: 0.0022528
Throughput: 69.33333333333333
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$./ns3 build
[0/2] Re-checking globbed directories...
ninja: no work to do.
Finished executing the following commands:
cd cmake-cache: /usr/bin/cmake --build -j 11 ; cd ..
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$./ns3 shell
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$python3 examples/tutorial/first.py
AnimationInterface WARNING:Node:0 Does not have a mobility model. Use SetConstantPosition if it is stationary
AnimationInterface WARNING:Node:1 Does not have a mobility model. Use SetConstantPosition if it is stationary
AnimationInterface WARNING:Node:0 Does not have a mobility model. Use SetConstantPosition if it is stationary
AnimationInterface WARNING:Node:1 Does not have a mobility model. Use SetConstantPosition if it is stationary
At time +2s client sent 256 bytes to 10.1.1.2 port 9
At time +2.00246s server received 256 bytes from 10.1.1.1 port 49153
At time +2.00246s server sent 256 bytes to 10.1.1.1 port 49153
At time +2.00492s client received 256 bytes from 10.1.1.2 port 9
FlowID: 1 (UDP 10.1.1.1/49153 --> 10.1.1.2/9)
Tx Bytes: 284
Rx Bytes: 284
Tx Packets: 1
Rx Packets: 1
Lost Packets: 0
Mean Delay: 0.0024576
Throughput: 126.22222222222223
FlowID: 2 (UDP 10.1.1.2/9 --> 10.1.1.1/49153)
Tx Bytes: 284
Rx Bytes: 284
Tx Packets: 1
Rx Packets: 1
Lost Packets: 0
Mean Delay: 0.0024576
Throughput: 126.22222222222223
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$^
```

```
Activities Terminal Jul 7 14:17
Sabaha Sadik
Sabaha Sadik
Lost Packets: 0
Mean Delay: 0.0024576
Throughput: 126.222222222223
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$ ./ns3 build
[0/2] Re-checking globbed directories...
ninja: no work to do.
Finished executing the following commands:
cd cmake-cache; /usr/bin/cmake --build . -j 11 ; cd ..
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$ ./ns3 shell
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$ python3 examples/tutorial/first.py
AnimationInterface WARNING:Node:0 Does not have a mobility model. Use SetConstantPosition if it is stationary
AnimationInterface WARNING:Node:1 Does not have a mobility model. Use SetConstantPosition if it is stationary
AnimationInterface WARNING:Node:1 Does not have a mobility model. Use SetConstantPosition if it is stationary
At time +2s client sent 512 bytes to 10.1.1.2 port 9
At time +2.00287s server received 512 bytes from 10.1.1.1 port 49153
At time +2.00287s server sent 512 bytes to 10.1.1.1 port 49153
At time +2.00573s client received 512 bytes from 10.1.1.2 port 9
FlowID: 1 (UDP 10.1.1.1/49153 --> 10.1.1.2/9)
Tx Bytes: 540
Rx Bytes: 540
Tx Packets: 1
Rx Packets: 1
Lost Packets: 0
Mean Delay: 0.0028672
Throughput: 240.0
FlowID: 2 (UDP 10.1.1.2/9 --> 10.1.1.1/49153)
Tx Bytes: 540
Rx Bytes: 540
Tx Packets: 1
Rx Packets: 1
Lost Packets: 0
Mean Delay: 0.0028672
Throughput: 240.0
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$
```

```
Activities Terminal Jul 7 14:18
Sabaha Sadik
Sabaha Sadik
Lost Packets: 0
Mean Delay: 0.0028672
Throughput: 240.0
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$ ./ns3 build
[0/2] Re-checking globbed directories...
ninja: no work to do.
Finished executing the following commands:
cd cmake-cache; /usr/bin/cmake --build . -j 11 ; cd ..
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$ ./ns3 shell
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$ python3 examples/tutorial/first.py
AnimationInterface WARNING:Node:0 Does not have a mobility model. Use SetConstantPosition if it is stationary
AnimationInterface WARNING:Node:1 Does not have a mobility model. Use SetConstantPosition if it is stationary
AnimationInterface WARNING:Node:0 Does not have a mobility model. Use SetConstantPosition if it is stationary
AnimationInterface WARNING:Node:1 Does not have a mobility model. Use SetConstantPosition if it is stationary
At time +2s client sent 1024 bytes to 10.1.1.2 port 9
At time +2.00369s server received 1024 bytes from 10.1.1.1 port 49153
At time +2.00369s server sent 1024 bytes to 10.1.1.1 port 49153
At time +2.00737s client received 1024 bytes from 10.1.1.2 port 9
FlowID: 1 (UDP 10.1.1.1/49153 --> 10.1.1.2/9)
Tx Bytes: 1052
Rx Bytes: 1052
Tx Packets: 1
Rx Packets: 1
Lost Packets: 0
Mean Delay: 0.0036864
Throughput: 467.5555555555554
FlowID: 2 (UDP 10.1.1.2/9 --> 10.1.1.1/49153)
Tx Bytes: 1052
Rx Bytes: 1052
Tx Packets: 1
Rx Packets: 1
Lost Packets: 0
Mean Delay: 0.0036864
Throughput: 467.5555555555554
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$
```

```
Activities Terminal Jul 7 14:18 Sabaha Sadik
Sabaha Sadik Sabaha Sadik
Lost Packets: 0
Mean Delay: 0.0036864
Throughput: 467.5555555555554
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$ ./ns3 build
[0/2] Re-checking globbed directories...
ninja: no work to do.
Finished executing the following commands:
cd cmake-cache; /usr/bin/cmake --build . -j 11 ; cd ..
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$ ./ns3 shell
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$ python3 examples/tutorial/first.py
AnimationInterface WARNING:Node:0 Does not have a mobility model. Use SetConstantPosition if it is stationary
AnimationInterface WARNING:Node:0 Does not have a mobility model. Use SetConstantPosition if it is stationary
AnimationInterface WARNING:Node:1 Does not have a mobility model. Use SetConstantPosition if it is stationary
At time +2s client sent 2048 bytes to 10.1.1.2 port 9
At time +2.00536s server received 2048 bytes from 10.1.1.1 port 49153
At time +2.00536s server sent 2048 bytes to 10.1.1.1 port 49153
At time +2.01072s client received 2048 bytes from 10.1.1.2 port 9
FlowID: 1 (UDP 10.1.1.1/49153 --> 10.1.1.2/9)
Tx Bytes: 2076
Rx Bytes: 2076
Tx Packets: 1
Rx Packets: 1
Lost Packets: 0
Mean Delay: 0.00536
Throughput: 922.6666666666666
FlowID: 2 (UDP 10.1.1.2/9 --> 10.1.1.1/49153)
Tx Bytes: 2076
Rx Bytes: 2076
Tx Packets: 1
Rx Packets: 1
Lost Packets: 0
Mean Delay: 0.00536
Throughput: 922.6666666666666
sabaha-sadik-22101094:~/Downloads/tamal/ns-allinone-3.40/ns-3.40$
```

# Graph



The graph illustrates the relationship between data size (in bytes) and throughput (in MB/s). When the data size increases, throughput rises almost linearly.