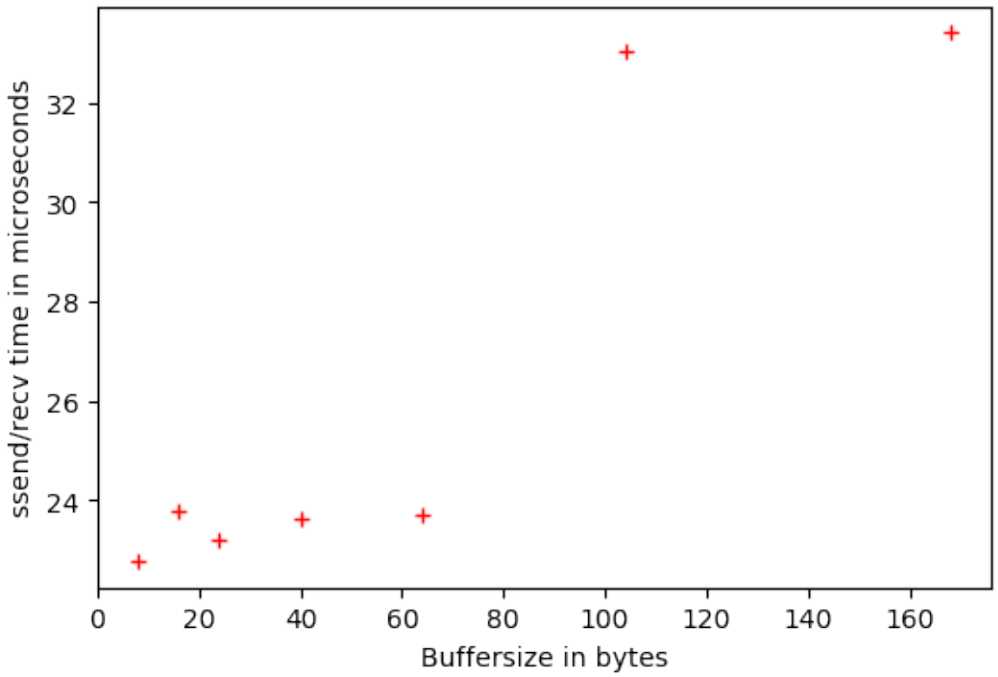
data-visualization

June 4, 2018

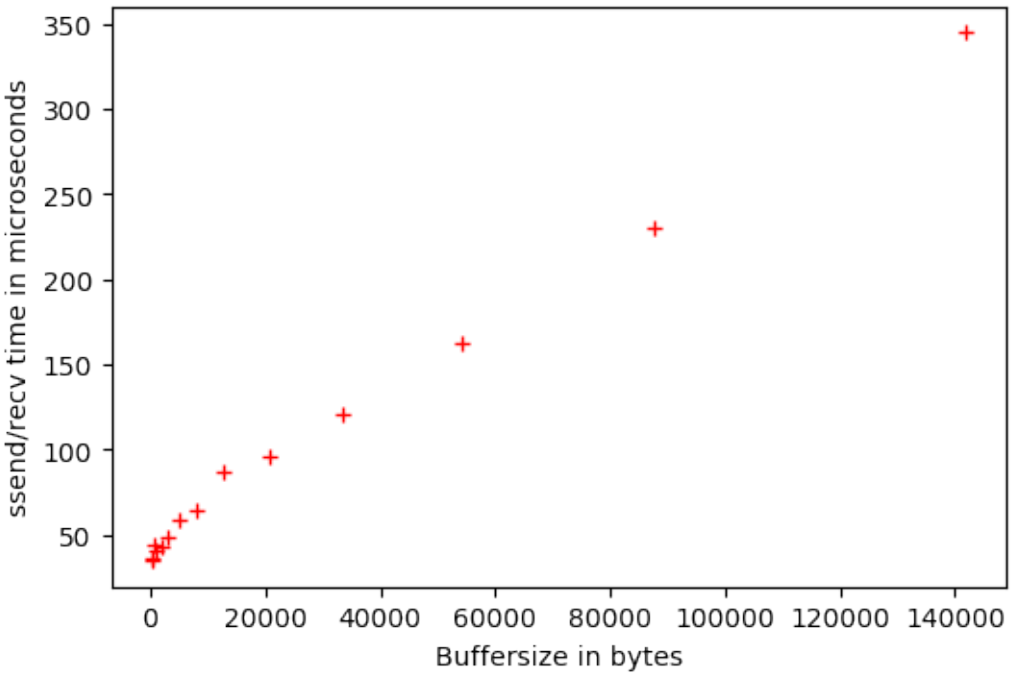
```
In [9]: import matplotlib.pyplot as plt
        import pandas as pd
        %matplotlib inline

In [10]: !head data-t40-n1000-grid.out
```

```
buffersize;t_average;send messages
8;3.68643e-06;1000
16;4.1635e-06;1000
24;2.64752e-06;1000
40;4.71246e-06;1000
64;3.13354e-06;1000
104;4.00949e-06;1000
168;3.96705e-06;1000
272;4.26745e-06;1000
440;4.34601e-06;1000
```

```
In [11]: !mv data-t40-n1000-grid.out data-t40-n1000-grid.csv

In [25]: df = pd.read_csv('data-t40-n100000-grid.csv', sep=';')

In [26]: df[:7].buffersize

Out[26]: 0      8
         1     16
         2     24
         3     40
         4     64
         5    104
         6    168
         Name: buffersize, dtype: int64

In [32]: data_head = df[:7]
         plt.figure(dpi=100)
         plt.xlabel('Buffersize in bytes')
         plt.ylabel('ssend/recv time in microseconds')
         plt.plot(data_head.buffersize, [x * 10e6 for x in data_head.t_average], 'r+');
```



In [31]:
```
data_head = df[7:]
plt.figure(dpi=100)
plt.xlabel('Buffersize in bytes')
plt.ylabel('ssend/recv time in microseconds')
plt.plot(data_head.buffersize, [x * 10e6 for x in data_head.t_average], 'r+');
```



```
In [33]: df = pd.read_csv('data-lin-t200-n100000.csv', sep=';')
         plt.figure(dpi=100)
         plt.xlabel('Buffersize in bytes')
         plt.ylabel('ssend/recv time in microseconds')
         plt.plot(df.buffersize, [x * 10e6 for x in df.t_average], 'r+');
```