

# TCPTrace

October 12, 2017

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In [ ]: %matplotlib notebook
import matplotlib.pyplot as plt

In [ ]: import time
import re
def parse(filename):
    x = []
    y = []

    x2 = []
    y2 = []
    f = open (filename)

    startTime = None

    for line in f.readlines():
        zeit, rest = line.split(".",1)

        # put a random date in here to make mktime happy
        tstamp = time.mktime(time.strptime("2011 " + zeit, "%Y %H:%M:%S"))
        msec, rest = rest.split(" ", 1)

        tstamp += float("0." + msec)

        if not startTime:
            startTime = tstamp

        m = re.match (".*seq ([0-9]*).*",rest)
        if m == None:
            #print "Skipped", line,
            continue

        seq = float(m.group(1))

        #if seq > (3.9) * 1e9:
        #    print "Skipped seq", seq
        #    continue
```

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    #if seq < (3.4 * 1e9):
    if line.find( "IP pluto.cs.uni-paderborn.de" ) !=-1:
        x.append(timestamp - startTime)
        y.append(seq)
    else:
        x2.append(timestamp - startTime)
        y2.append(seq)
print
return x,y,x2,y2

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In [ ]: x,y,x2,y2 = parse("../figures/tcp2.log")
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In [ ]: fig, (ax1, ax2) = pl.subplots(ncols=2, figsize=(8,8), sh)
ax1.plot(x2,y2,"x",alpha=0.5)
ax2.plot(x2,y2,"x",alpha=0.5)
ax2.set_ylim(min(y2), min(y2)+400000)
ax2.set_xlim(0,0.020)

fig.tight_layout()
fig.savefig("plot2.pdf", transparent=True)

```

```
In [ ]: x,y,x2,y2 = parse("../figures/tcp3.log")
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```
In [ ]: fig, (ax1, ax2) = pl.subplots(ncols=2, figsize=(8,8))
ax1.plot(x2,y2,"x",alpha=0.5)
ax2.plot(x2,y2,"x",alpha=0.5)
ax2.set_ylim(382000000 , 382500000)
ax2.set_xlim(10,20)

fig.tight_layout()
fig.savefig("plot3.pdf", transparent=True)

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