

Collisioni prima del test	Collisioni dopo il test	Velocità sender	Velocità receiver
44706	46985	7.13	6.94
46985	50133	7.03	6.82
50133	52652	7.13	7.03
52652	54812	7.24	7.08
54812	56999	7.24	7.06
56999	60774	6.71	6.55
60774	63026	7.13	6.96
63026	65215	7.24	7.05
65215	67387	7.03	6.89
67387	69572	7.13	6.93

A Script per collezionare i dati

```
for((s=100; s<15000; s+=100))
do
    echo -n $s >> dataset.dat
    sudo ping 192.168.1.XX -s $s -c 5 -i 0,05 | grep min
        | cut -d '=' -f2 | cut -d '/' -f1 >> dataset.dat
done
```

B Script configurazione 1

```
set xlabel "size L1 [byte]"
set ylabel "RTT [ms]"

set terminal png size 1024, 768

D(x)=(x+8)+(20+38)*(1+floor((x+8-1)/1480))

set output "RTTp.png"

plot 'rtt_min_h2.dat' using (D($1)):2 title "RTT powerline" with linespoint

set xlabel "size [byte]"
set ylabel "velocità [kbyte]"
set output "VTx.png"

plot 'rtt_min_h2.dat' using (D($1)):(($1<1472 ? (8*4*(D($1))/($2)) :
((8*2*(D($1))/($2)) + (8*2*(D(1538))/($2)))) :
title "VTx H2 powerline" with linespoint
```

C Script configurazione 2

```
set xlabel "size L1 [byte]"
set ylabel "RTT [ms]"

set terminal png size 1024, 768

D(x)=(x+8)+(20+38)*(1+floor((x+8-1)/1480))

set output "RTTp.png"

plot 'rtt_min_h2.dat' using (D($1)):2 title "RTT powerline" with linespoint

set xlabel "size [byte]"
```

```
set ylabel "velocità [kbyte]"
set output "VTx.png"

plot 'rtt_min_h2.dat' using (D($1)):(8*2*(D($1))/($2))
    title "VTx H2 powerline" with linespoint
```

D Script configurazione 3

```
set xlabel "size L1 [Byte]"
set ylabel "RTT [ms]"

set terminal png size 1024, 768

D(x)=(x+8)+(20+38)*(1+floor((x+8-1)/1480))

set output "RTTW.png"

plot 'rtt_min_wifi.dat' using (D($1)):2 title "RTT" with linespoint

set xlabel "size [Byte]"
set ylabel "velocità [KBit]"

set output "VTxW.png"

plot 'rtt_min_wifi.dat' using (D($1)):( D($1)<1500 ?
  (((2*8*10000000*D($1))/( (10000)*($2) - 2*8*D($1) ))*0.001) :
  (((2*8*10000000*1538)/( (10000)*($2) - 2*8*D($1) ))*0.001 ) )
  title "VTx" with linespoint
```

E Script configurazione 4

```
set xlabel "size L1 [byte]"
set ylabel "RTT [ms]"

set terminal png size 1024, 768

D(x)=(x+8)+(20+38)*(1+floor((x+8-1)/1480))

set output "RTTPow.png"

plot 'rtt_min_h2_con_powerline.dat' using (D($1)):2 title "RTT" with linespoint

set xlabel "size [byte]"
set ylabel "velocità [kbyte]"

set output "VTxPow.png"

plot 'rtt_min_h2_con_powerline.dat' using (D($1)):( D($1)<1500 ?
  (4*8*D($1)*10**7*10**8/( ($2)*10**4*10**8 - (2*8*10**8*D($1)) -
  (6*8*10**7*D($1)) ))*0.001 : (4*8*1538*10**7*10**8/( ($2)*10**4*10**8 -
  (2*8*10**8*D($1)) - (6*8*10**7*D($1)) ))*0.001 ) with linespoint
```