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LAMPIRAN :

1. *Listing program*
2. *Penggalan hasil trace file*
3. Hasil rekaman MRTG
(*Multi Router Traffic Grapher*)

LISTING PROGRAM SIMULASI

JARINGAN AREA KAMPUS UNHAS DENGAN NS-2.31

```
# 6 cluster, link duplex
set ns [new Simulator]
set tracefile [open unhas-3ISP_500-512.tr w]
$ns trace all $tracefile
set namfile [open unhas-3ISP_500-512.nam w]
$ns namtrace-all $namfile
set indosat [$ns node]
set shaper [$ns node]
set astinet [$ns node]
set switch1 [$ns node]
set server0 [$ns node]
set balance [$ns node]
set shaper [$ns node]
set proxy [$ns node]
set switch2 [$ns node]
set routSOI [$ns node]
set JCsat [$ns node]
set SOI [$ns node]
set Switch3 [$ns node]
set Teknik [$ns node]
set Kedokteran [$ns node]
set MIPA [$ns node]
set Pertanian [$ns node]
set FIKP [$ns node]
set Ekonomi [$ns node]
$indosat color blue
$astinet color blue
$switch1 color red
$server0 color blue
$balance color gold
$shaper color gold
$proxy color gold
$switch2 color red
$routSOI color green
$JCsat color green
$SOI color blue
$switch3 color red
$switch4 color red
$Teknik color red
$Kedokteran color red
$MIPA color red
$Pertanian color red
```

```

$FIKP color red
$Ekonomi color red
$server0 label "SERVER"
$$SOI label "SERVER_SOI"
$switch1 label "SWITCH-1"
$switch2 label "SWITCH-2"
$switch3 label "SWITCH-3"
$switch4 label "SWITCH-4"
$indosat label "INDOSAT"
$astinet label "ASTINET"
$balance label "Load Balance"
$shaper label "BW-Manager"
$proxy label "Proxy"
$ROUTSOI label "Router-SOI"
$JCSat label "JC-Sat"
$Teknik label "Teknik"
$Kedokteran label "Kedokteran"
$MIPA label "MIPA"
$Pertanian label "Pertanian"
$FIKP label "FIKP"
$Ekonomi label "Ekonomi"
$server0 shape hexagon
$$SOI shape hexagon
$switch1 shape box
$switch2 shape box
$switch3 shape box
$switch4 shape box
$Teknik shape box
$Kedokteran shape box
$MIPA shape box
$Pertanian shape box
$FIKP shape box
$Ekonomi shape box
$balance shape box
$shaper shape box
$proxy shape box
$ROUTSOI shape box
$ns duplex-link $indosat $switch1 1.5Mb 65ms DropTail
$ns duplex-link $server0 $switch1 3.5Mb 1ms DropTail
$ns duplex-link $switch1 $balance 1.5Mb 0.5ms DropTail
$ns duplex-link $astinet $balance 2Mb 65ms DropTail
$ns duplex-link $balance $shaper 3.5Mb 0.5ms DropTail
$ns duplex-link $switch1 $MIPA 256kb 50ms DropTail
$ns duplex-link $shaper $proxy 3.5Mb 0.5ms DropTail
$ns duplex-link $shaper $switch2 3.5Mb 0.5ms DropTail
$ns duplex-link $proxy $switch2 512kb 0.5ms DropTail
$ns duplex-link $switch1 $Pertanian 512kb 60ms DropTail

```

```

$ftp2($i) attach-agent $tcp2($i)
set sink2($i) [new Agent/TCPSink]
$tcp2($i) set packetSize_ 500
$ns attach-agent $Array($i) $sink2($i)
$ns connect $tcp2($i) $sink2($i)
set tcp3($i) [new Agent/TCP]
$ns attach-agent $proxy $tcp3($i)
set ftp3($i) [new Application/FTP]
$ftp3($i) attach-agent $tcp3($i)
set sink3($i) [new Agent/TCPSink]
$tcp3($i) set packetSize_ 500
$ns attach-agent $Array($i) $sink3($i)
$ns connect $tcp3($i) $sink3($i)
$ns at 0.03 "$ftp1($i) start"
$ns at 29.98 "$ftp1($i) stop"
$tcp1($i) set fid_ 7
$ns at 0.03 "$ftp2($i) start"
$ns at 29.98 "$ftp2($i) stop"
$tcp2($i) set fid_ 2
$ns at 0.03 "$ftp3($i) start"
$ns at 29.98 "$ftp3($i) stop"
$tcp3($i) set fid_ 4}
for {set j 0} {$i<10} {incr i} {
set array ($j) [$ns node]
$ns duplex-link $node($i) $MIPA 56kb 1ms
$ns queue -limit $Array($i) $MIPA 30
set tcp1($i) [new Agent/TCP]
$ns attach-agent $indosat $tcp1($i)
set ftp1($i) [new Application/FTP]
$ftp1($i) attach-agent $tcp1($i)
set sink1($i) [new Agent/TCPSink]
$tcp1($i) set packetSize_ 500
$ns attach-agent $Array($i) $sink1($i)
$ns connect $tcp1($i) $sink1($i)
set tcp2($i) [new Agent/TCP]
$ns attach-agent $astinet $tcp2($i)
set ftp2($i) [new Application/FTP]
$ftp2($i) attach-agent $tcp2($i)
set sink2($i) [new Agent/TCPSink]
$tcp2($i) set packet size500
ns attach-agent $Array($i) $sink2($i)
$ns connect $tcp2($i) $sink2($i)
tcp3 dan ftp3
set tcp3($i) [new Agent/TCP]
$ns attach-agent $proxy $tcp3($i)
set ftp3($i) [new Application/FTP]
$ftp3($i) attach-agent $tcp3($i)

```

```

set ftp1($i) [new Application/FTP]
$ftp1($i) attach-agent $tcp1($i)
set sink1($i) [new Agent/TCPSink]
$tcp1($i) set packetSize_ 500
$ns attach-agent $Array($i) $sink1($i)
$ns connect $tcp1($i) $sink1($i)
tcp2($i) [new Agent/TCP]
$ns attach-agent $astinet $tcp2($i)
set ftp2($i) [new Application/FTP]
$ftp2($i) attach-agent $tcp2($i)
set sink2($i) [new Agent/TCPSink]
$tcp2($i) set packetSize_ 500
$ns attach-agent $Array($i) $sink2($i)
$ns connect $tcp2($i) $sink2($i)
set tcp3($i) [new Agent/TCP]
$ns attach-agent $proxy $tcp3($i)
set ftp3($i) [new Application/FTP]
$ftp3($i) attach-agent $tcp3($i)
set sink3($i) [new Agent/TCPSink]
$tcp3($i) set packetSize_ 500
$ns attach-agent $Array($i) $sink3($i)
$ns connect $tcp3($i) $sink3($i)
$ns at 0.03 "$ftp1($i) start"
$ns at 29.98 "$ftp1($i) stop"
$ns queue -limit $Array($i) $Kedokteran 30
$tcp1($i) set fid_ 1
$ns at 0.03 "$ftp2(i) start"
$ns at 29.98 "$ftp2($i) stop"
$tcp2($i) set fid_ 2
$ns at 0.03 "$ftp3($i) start"
$ns at 29.98 "$ftp3($i) stop"
$tcp3($i) set fid_ 8
for {set j 0 $i<10} {incr i} {
set node($i) [$ns node]
$ns duplex-link $array($i) $Kedokteran 56kb 1m
$ns queue -limit $Array($i) $Kedokteran 30
set tcp1($i) [new Agent/TCP]
$ns attach-agent $indosat $tcp1($i)
set ftp1($i) [new Application/FTP]
$ftp1($i) attach-agent $tcp1($i)
set sink1($i) [new Agent/TCPSink]
$tcp1($i) set packetSize_ 500
$ns attach-agent $Array($i) $sink1($i)
$ns connect $tcp1($i) $sink1($i)
set tcp2($i) [new Agent/TCP]
$ns attach-agent $astinet $tcp2( $i)

```

```

set ftp2($i) [new Application/FTP]
$ftp2($i) attach-agent $tcp2($i)
set sink2($i) [new Agent/TCPSink]
$tcp2($i) set packetSize_ 500
$ns attach-agent $Array($i) $sink2($i)
$ns connect $tcp2($i) $sink2($i)
set tcp3($i) [new Agent/TCP]
$ns attach-agent $proxy $tcp3($i)
set ftp3($i) [new Application/FTP]
$ftp3($i) attach-agent $tcp3($i)
set sink3($i) [new Agent/TCPSink]
$tcp3($i) set packetSize_ 500
$ns attach-agent $Array($i) $sink3($i)
$ns connect $tcp3($i) $sink3($i)
$ns at 0.03 "$ftp1($i) start"
$ns at 29.98 "$ftp1($i) stop"
$tcp1($i) set fid_ 7
$ns at 0.03 "$ftp2($i) start"
$ns at 29.98 "$ftp2($i) stop"
$tcp2($i) set fid_ 2
$ns at 0.03 "$ftp3($i) start"
$ns at 29.98 "$ftp3($i) stop"
$tcp3($i) set fid_ 4}
for {set j 0} {$i<10} {incr i} {
set array ($j) [$ns node]
$ns duplex-link $node($i) $MIPA 56kb 1ms
$ns queue -limit $Array($i) $MIPA 30
set tcp1($i) [new Agent/TCP]
$ns attach-agent $indosat $tcp1($i)
set ftp1($i) [new Application/FTP]
$ftp1($i) attach-agent $tcp1($i)
set sink1($i) [new Agent/TCPSink]
$tcp1($i) set packetSize_ 500
$ns attach-agent $Array($i) $sink1($i)
$ns connect $tcp1($i) $sink1($i)
set tcp2($i) [new Agent/TCP]
$ns attach-agent $astinet $tcp2($i)
set ftp2($i) [new Application/FTP]
$ftp2($i) attach-agent $tcp2($i)
set sink2($i) [new Agent/TCPSink]
$tcp2($i) set packet size500
ns attach-agent $Array($i) $sink2($i)
$ns connect $tcp2($i) $sink2($i)
tcp3 dan ftp3
set tcp3($i) [new Agent/TCP]
$ns attach-agent $proxy $tcp3($i)
set ftp3($i) [new Application/FTP]

```

```

$ftp3($i) attach-agent $tcp3($i)
set sink3($i) [new Agent/TCPSink]
$ns attach-agent $Array($i) $sink3($i)
$ns connect $tcp3($i) $sink3($i)
$ns at 0.03 "$ftp1($i) start"
$ns at 29.98 "$ftp1($i) stop"
tcp1($i) set fid_ 1
$ns at 0.03 "$ftp2($i) start"
$ns at 29.98 "$ftp2($i) stop"
$tcp2($i) set fid_ 2
$ns at 0.03 "$ftp3($i) start"
$ns at 29.98 "$ftp3($i) stop"
$tcp3($i) set fid_ 4
source and sink
for {set i 0} {$i<10} {incr i} {
set Array($i) [$ns node]
$ns queue_limit $Array($i) $Pertanian 30
set tcp1($i) [new Agent/TCP]
$ns attach-agent $indosat $tcp1($i)
set ftp1($i) [new Application/FTP]
$ftp1($i) attach-agent $tcp1($i)
set sink1($i) [new Agent/TCPSink]
$ns duplex-link $Array($i) $Pertanian 56kb 1ms
$tcp1($i) set packetSize_ 500
$ns attach-agent $Array($i) $sink1($i)
$ns connect $tcp1($i) $sink1($i)
set tcp2($i) [new Agent/TCP]
$ns attach-agent $astinet $tcp2($i)
set ftp2($i) [new Application/FTP]
$ftp2($i) attach-agent $tcp2($i)
set sink2($i) [new Agent/TCPSink]
$tcp2($i) set packet size_ 500
$ns attach-agent $Array($i) $sink2($i)
$ns connect $tcp2($i) $sink2($i)
set tcp3($i) [new Agent/TCP]
$ns attach-agent $proxy $tcp3($i)
set ftp3($i) [new Application/FTP]
$ftp3($i) attach-agent $tcp3($i)
set sink3($i) [new Agent/TCPSink]
$tcp3($i) set packetSize_ 500
$ns attach-agent $Array($i) $sink3($i)
$ns connect $tcp3($i) $sink3($i)
$ns at 0.03 "$ftp1($i) start"
$ns at 29.98 "$ftp1($i) stop"
$tcp1($i) set fid_ 1
$ns at 0.03 "$ftp2($i) start"
$ns at 29.98 "$ftp2($i) stop"

```

```

$tcp2($i) set fid_ 2
$ns at 0.03 "$ftp3($i) start"
$ns at 29.98 "$ftp3($i) stop"
$tcp3($i) set fid_ 4}
for {set i 0} {$i<10} {incr i} {
set Array($i) [$ns node]
$ns queue -limit $Array($i) $FIKP 30
set tcp1($i) [new Agent/TCP]
$ns attach-agent $indosat $tcp1($i)
set ftp1($i) [new Application/FTP]
$ftp1($i) attach-agent $tcp1($i)
set sink1($i) [new Agent/TCPSink]
$tcp1($i) set packetSize 500
$ns attach-agent $Array($i) $sink1($i)
$ns connect $tcp1($i) $sink1($i)
set tcp2($i) [new Agent/TCP]
$ns attach-agent $astinet $tcp2($i)
set ftp2($i) [new Application/FTP]
$ftp2($i) attach-agent $tcp2($i)
set sink2($i) [new Agent/TCPSink]
$tcp2($i) set packetSize_ 500
$ns attach-agent $Array($i) $sink2($i)
$ns connect $tcp2($i) $sink2($i)
set tcp3($i) [new Agent/TCP]
$ns attach-agent $proxy $tcp3($i)
set ftp3($i) [new Application/FTP]
$ftp3($i) attach-agent $tcp3($i)
set sink3($i) [new Agent/TCPSink]
$tcp3($i) set packetSize_ 500
$ns attach-agent $Array($i) $sink3($i)
$ns at 0.03 "$ftp1($i) start"
$ns at 29.98 "$ftp1($i) stop"
$tcp1($i) set fid_ 1
$ns at 0.03 "$ftp2($i) start"
$ns at 29.98 "$ftp2($i) stop"
$tcp2($i) set fid_ 2
$ns at 0.03 "$ftp3($i) start"
$ns at 29.98 "$ftp3($i) stop"
$tcp3($i) set fid_ 4
for {set i 0} {$i<15} {incr i} {
set Array($i) [$ns node]
$ns duplex-link $Ekonomi 56kb 1ms DropTail
$ns queue -limit $Array($i) $Ekonomi 30
set tcp1($i) [new Agent/TCP]
$ns attach-agent $indosat $tcp1($i)
set ftp1($i) [new Application/FTP]
$ftp1($i) attach-agent $tcp1($i)

```

```

set sink1($i) [new Agent/TCPSink]
$tcp1($i) set packetSize_ 500
$ns attach-agent $Array($i) $sink1($i)
$ns connect $tcp1($i) $sink1($i)
set tcp2($i) [new Agent/TCP]
$ns attach-agent $astinet $tcp2($i)
set ftp2($i) [new Application/FTP]
$ftp2($i) attach-agent $tcp2($i)
set sink2($i) [new Agent/TCPSink]
$tcp2($i) set packetSize_ 500
$ns attach-agent $Array($i) $sink2($i)
$ns connect $tcp2($i) $sink2($i)
set tcp3($i) [new Agent/TCP]
$ns attach-agent $proxy $tcp3($i)
set ftp3($i) [new Application/FTP]
$ftp3($i) attach-agent $tcp3($i)
set sink3($i) [new Agent/TCPSink]
$tcp3($i) set packetSize_ 500
$ns attach-agent $Array($i) $sink3($i)
$ns connect $tcp3($i) $sink3($i)
$ns at 0.03 "$ftp1($i) start"
$ns at 29.98 "$ftp1($i) stop"
$tcp1($i) set fid_ 1
$ns at 0.03 "$ftp2($i) start"
$ns at 29.98 "$ftp2($i) stop"
$tcp2($i) set fid_ 2
$ns at 0.03 "$ftp3($i) start"
$ns at 29.98 "$ftp3($i) stop"
$tcp3($i) set fid_ 4
additional output file
global ns tracefile namfile
close tracefile
close namfile
exec nam unhas_3ISP-500-512 &
exit 0
$ns at 30.0, finish
$ns run

```

<i>event</i>	<i>time</i>	<i>from node</i>	<i>to node</i>	<i>pkt type</i>	<i>pkt size</i>	<i>Flags</i>	<i>Fid</i>	<i>Source addr</i>	<i>dest addr</i>	<i>sequen number</i>	<i>pkt id</i>
+	0.308918	1	4	tcp	540	-----	2	1.63	82.1	1	534
-	0.352918	1	4	tcp	540	-----	2	1.63	82.1	1	534
r	0.420078	1	4	tcp	540	-----	2	1.63	82.1	1	534
+	0.420078	4	5	tcp	540	-----	2	1.63	82.1	1	534
-	0.420168	4	5	tcp	540	-----	2	1.63	82.1	1	534
r	0.421902	4	5	tcp	540	-----	2	1.63	82.1	1	534
+	0.421902	5	7	tcp	540	-----	2	1.63	82.1	1	534
-	0.421902	5	7	tcp	540	-----	2	1.63	82.1	1	534
r	0.423636	5	7	tcp	540	-----	2	1.63	82.1	1	534
+	0.423636	7	11	tcp	540	-----	2	1.63	82.1	1	534
-	0.453036	7	11	tcp	540	-----	2	1.63	82.1	1	534
r	0.504914	7	11	tcp	540	-----	2	1.63	82.1	1	534
+	0.504914	11	18	tcp	540	-----	2	1.63	82.1	1	534
-	0.605025	11	18	tcp	540	-----	2	1.63	82.1	1	534
r	0.619345	11	18	tcp	540	-----	2	1.63	82.1	1	534
+	0.619345	18	82	tcp	540	-----	2	1.63	82.1	1	534
-	0.652671	18	82	tcp	540	-----	2	1.63	82.1	1	534
r	0.730814	18	82	tcp	540	-----	2	1.63	82.1	1	534

```

.....
.....
+ 3.052006 12 14 tcp 540 ----- 2 1.20 39.1 16 3366 + 3.566159 7 12 tcp 540 ----- 4 6.11 30.2 4 2751
r 3.052223 5 7 tcp 540 ----- 1 0.11 30.0 9 4211 d 3.566159 7 12 tcp 540 ----- 4 6.11 30.2 4 2751
+ 3.052223 7 12 tcp 540 ----- 1 0.11 30.0 9 4211 r 3.566357 5 4 ack 40 ----- 2 39.1 1.20 11 5316
d 3.052223 7 12 tcp 540 ----- 1 0.11 30.0 9 4211 + 3.566357 4 1 ack 40 ----- 2 39.1 1.20 11 5316
- 3.052255 12 13 tcp 540 ----- 4 6.9 28.2 1 1785 - 3.566357 4 1 ack 40 ----- 2 39.1 1.20 11 5316
r 3.052387 11 18 tcp 540 ----- 1 0.64 83.0 6 4140 r 3.566406 12 15 tcp 540 ----- 1 0.28 47.0 7 3788
+ 3.052387 18 83 tcp 540 ----- 1 0.64 83.0 6 4140 + 3.566406 15 47 tcp 540 ----- 1 0.28 47.0 7 3788
- 3.052387 18 83 tcp 540 ----- 1 0.64 83.0 6 4140 r 3.56642 4 5 tcp 540 ----- 1 0.33 52.0 21 4919
- 3.05241 14 37 tcp 540 ----- 2 1.18 37.1 15 3149 + 3.56642 5 7 tcp 540 ----- 1 0.33 52.0 21 4919
- 3.052458 4 5 tcp 540 ----- 2 1.60 79.1 30 3840 - 3.56642 5 7 tcp 540 ----- 1 0.33 52.0 21 4919
r 3.052647 12 7 ack 40 ----- 1 54.0 0.35 9 4606 r 3.566535 2 4 tcp 540 ----- 1 0.33 52.0 22 4920
+ 3.052647 7 5 ack 40 ----- 1 54.0 0.35 9 4606 + 3.566535 4 5 tcp 540 ----- 1 0.33 52.0 22 4920
- 3.052647 7 5 ack 40 ----- 1 54.0 0.35 9 4606 r 3.566649 7 12 tcp 540 ----- 2 1.30 49.1 10 3834
- 3.052719 7 12 tcp 540 ----- 1 0.26 45.0 12 3856 + 3.566649 12 15 tcp 540 ----- 2 1.30 49.1 10 3834
r 3.052775 55 16 ack 40 ----- 1 55.0 0.36 10 4748 r 3.566755 13 12 ack 40 ----- 2 20.1 1.1 14 5297
+ 3.052775 16 12 ack 40 ----- 1 55.0 0.36 10 4748 + 3.566755 12 7 ack 40 ----- 2 20.1 1.1 14 5297
- 3.052775 16 12 ack 40 ----- 1 55.0 0.36 10 4748 - 3.566755 12 7 ack 40 ----- 2 20.1 1.1 14 5297
- 3.052923 15 42 tcp 540 ----- 2 1.23 42.1 12 2951 r 3.56692 5 7 tcp 540 ----- 2 1.46 65.1 13 4881
r 3.052958 4 5 tcp 540 ----- 1 0.11 30.0 10 4212 + 3.56692 7 12 tcp 540 ----- 2 1.46 65.1 13 4881
+ 3.052958 5 7 tcp 540 ----- 1 0.11 30.0 10 4212 d 3.56692 7 12 tcp 540 ----- 2 1.46 65.1 13 4881
- 3.052958 5 7 tcp 540 ----- 1 0.11 30.0 10 4212 - 3.566943 12 13 tcp 540 ----- 2 1.8 27.1 11 3580
r 3.053051 4 1 ack 40 ----- 2 22.1 1.3 10 4463 r 3.567027 12 7 ack 40 ----- 2 46.1 1.27 3 5294
+ 3.053051 1 4 tcp 540 ----- 2 1.3 22.1 21 4757 + 3.567027 7 5 ack 40 ----- 2 46.1 1.27 3 5294
+ 3.053051 1 4 tcp 540 ----- 2 1.3 22.1 22 4758 - 3.567027 7 5 ack 40 ----- 2 46.1 1.27 3 5294
r 3.053238 7 5 ack 40 ----- 1 54.0 0.35 9 4606 - 3.567031 12 15 tcp 540 ----- 1 0.22 41.0 3 3891
+ 3.053238 5 4 ack 40 ----- 1 54.0 0.35 9 4606 - 3.567098 14 35 tcp 540 ----- 2 1.16 35.1 25 3630
- 3.053238 5 4 ack 40 ----- 1 54.0 0.35 9 4606 - 3.567155 4 5 tcp 540 ----- 1 0.33 52.0 22 4920
r 3.053395 0 2 tcp 540 ----- 1 0.29 48.0 12 4214 - 3.567275 0 2 tcp 540 ----- 1 0.3 22.0 17 5031
+ 3.053395 2 4 tcp 540 ----- 1 0.29 48.0 12 4214 - 3.567362 7 12 tcp 540 ----- 2 1.37 56.1 19 3926
- 3.053395 2 4 tcp 540 ----- 1 0.29 48.0 12 4214 r 3.56738 29 13 ack 40 ----- 2 29.1 1.10 8 5416
r 3.05341 14 37 tcp 540 ----- 4 6.18 37.2 4 1652 + 3.56738 13 12 ack 40 ----- 2 29.1 1.10 8 5416
+ 3.05341 37 14 ack 40 ----- 4 37.2 6.18 4 4759 - 3.56738 13 12 ack 40 ----- 2 29.1 1.10 8 5416
- 3.05341 37 14 ack 40 ----- 4 37.2 6.18 4 4759 r 3.56738 22 13 ack 40 ----- 2 22.1 1.3 14 5417
r 3.053458 5 7 tcp 540 ----- 2 1.60 79.1 29 3839 + 3.56738 13 12 ack 40 ----- 2 22.1 1.3 14 5417
+ 3.053458 7 11 tcp 540 ----- 2 1.60 79.1 29 3839 r 3.567529 16 12 ack 40 ----- 2 51.1 1.32 15 5341
- 3.053458 7 11 tcp 540 ----- 2 1.60 79.1 29 3839 + 3.567529 12 7 ack 40 ----- 2 51.1 1.32 15 5341
- 3.053492 1 4 tcp 540 ----- 2 1.32 51.1 23 3986 - 3.567529 12 7 ack 40 ----- 2 51.1 1.32 15 5341
r 3.053692 1 4 tcp 540 ----- 2 1.32 51.1 21 3842 - 3.567572 1 4 tcp 540 ----- 2 1.57 76.1 17 5013
+ 3.053692 4 5 tcp 540 ----- 2 1.32 51.1 21 3842 r 3.567618 7 5 ack 40 ----- 2 46.1 1.27 3 5294
- 3.053692 4 5 tcp 540 ----- 2 1.32 51.1 21 3842 + 3.567618 5 4 ack 40 ----- 2 46.1 1.27 3 5294
- 3.053766 12 16 tcp 540 ----- 1 0.38 57.0 13 3597 - 3.567618 5 4 ack 40 ----- 2 46.1 1.27 3 5294
r 3.053829 5 4 ack 40 ----- 1 54.0 0.35 9 4606 r 3.567633 4 1 ack 40 ----- 2 35.1 1.16 14 5244
+ 3.053829 4 2 ack 40 ----- 1 54.0 0.35 9 4606 r 3.567655 4 5 tcp 540 ----- 2 1.60 79.1 35 4883
- 3.053829 4 2 ack 40 ----- 1 54.0 0.35 9 4606 + 3.567655 5 7 tcp 540 ----- 2 1.60 79.1 35 4883
r 3.053884 7 12 tcp 540 ----- 1 0.6 25.0 7 3801 - 3.567655 5 7 tcp 540 ----- 2 1.60 79.1 35 4883
+ 3.053884 12 13 tcp 540 ----- 1 0.6 25.0 7 3801 r 3.567772 1 4 tcp 540 ----- 2 1.60 79.1 36 4884
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dan seterusnya sampai detik ke 30.