

SIMPLE LAN NETWORK

A simple LAN network with 5 nodes , flow of UDP pack from node0 to node3,

And flow of TCP packets from node2 to node5

Ns2 code:-

```
set ns [new Simulator]
```

```
set tracefile [open LAN.tr w]
```

```
$ns trace-all $tracefile
```

```
set namfile [open LAN.nam w]
```

```
$ns namtrace-all $namfile
```

```
set n0 [$ns node]
```

```
set n1 [$ns node]
```

```
set n2 [$ns node]
```

```
set n3 [$ns node]
```

```
set n4 [$ns node]
```

```
set n5 [$ns node]
```

```
$ns duplex-link $n0 $n1 5Mb 2ms DropTail
```

```
$ns duplex-link $n2 $n1 10Mb 4ms DropTail
```

```
$ns duplex-link $n1 $n4 3Mb 10ms DropTail
```

```
$ns duplex-link $n4 $n3 100Mb 2ms DropTail
```

```
$ns duplex-link $n4 $n5 4Mb 10ms DropTail
```

```
set UDP [new Agent/UDP]
```

```
set null [new Agent/Null]
```

```
$ns attach-agent $n0 $UDP
```

```
$ns attach-agent $n3 $null
```

```
$ns connect $UDP $null
```

```
set TCP [new Agent/TCP]
```

```
set sink [new Agent/TCPSink]
```

```
$ns attach-agent $n2 $TCP
```

```
$ns attach-agent $n5 $sink
```

```
$ns connect $TCP $sink
```

```
set cbr [new Application/Traffic/CBR]
```

```
$cbr attach-agent $UDP
```

```
set ftp [new Application/FTP]
```

```
$ftp attach-agent $TCP
```

```
$ns at 1.0 "$cbr start"
```

```
$ns at 2.0 "$ftp start"
```

```
$ns at 10.0 "finish"
```

```
proc finish {} {
```

```
global ns tracefile namfile
```

```
$ns flush-trace
```

```
close $tracefile
```

```
close $namfile
```

```
exit 0
```

```
}
```

```
puts "LAN Network with 5 nodes"
```

```
puts "CBR connection UDP packets flow from node0 to node3"
```

```
puts "FTP connection TCP packets flow from node2 to node5"
```

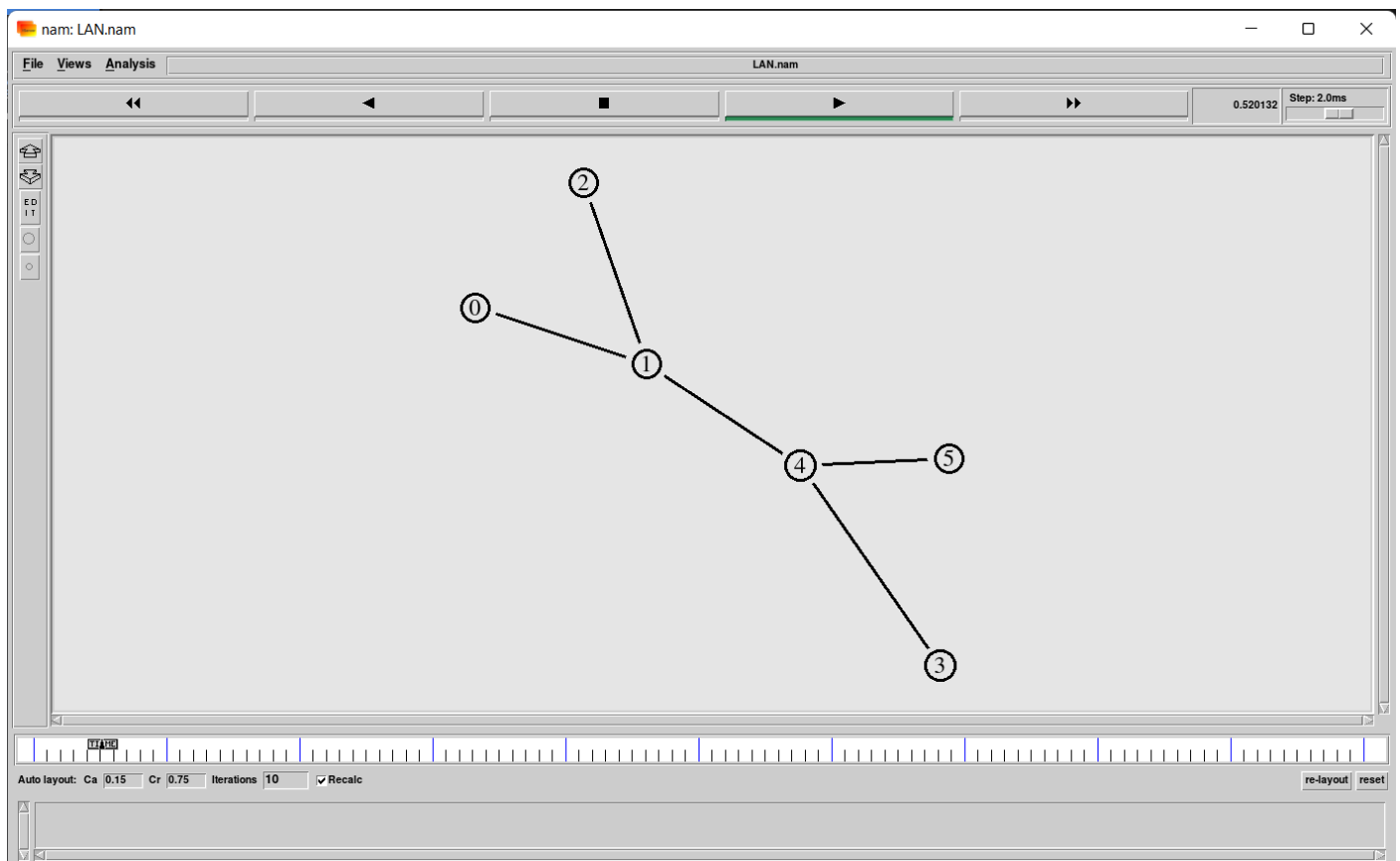
```
$ns run
```

OUTPUT

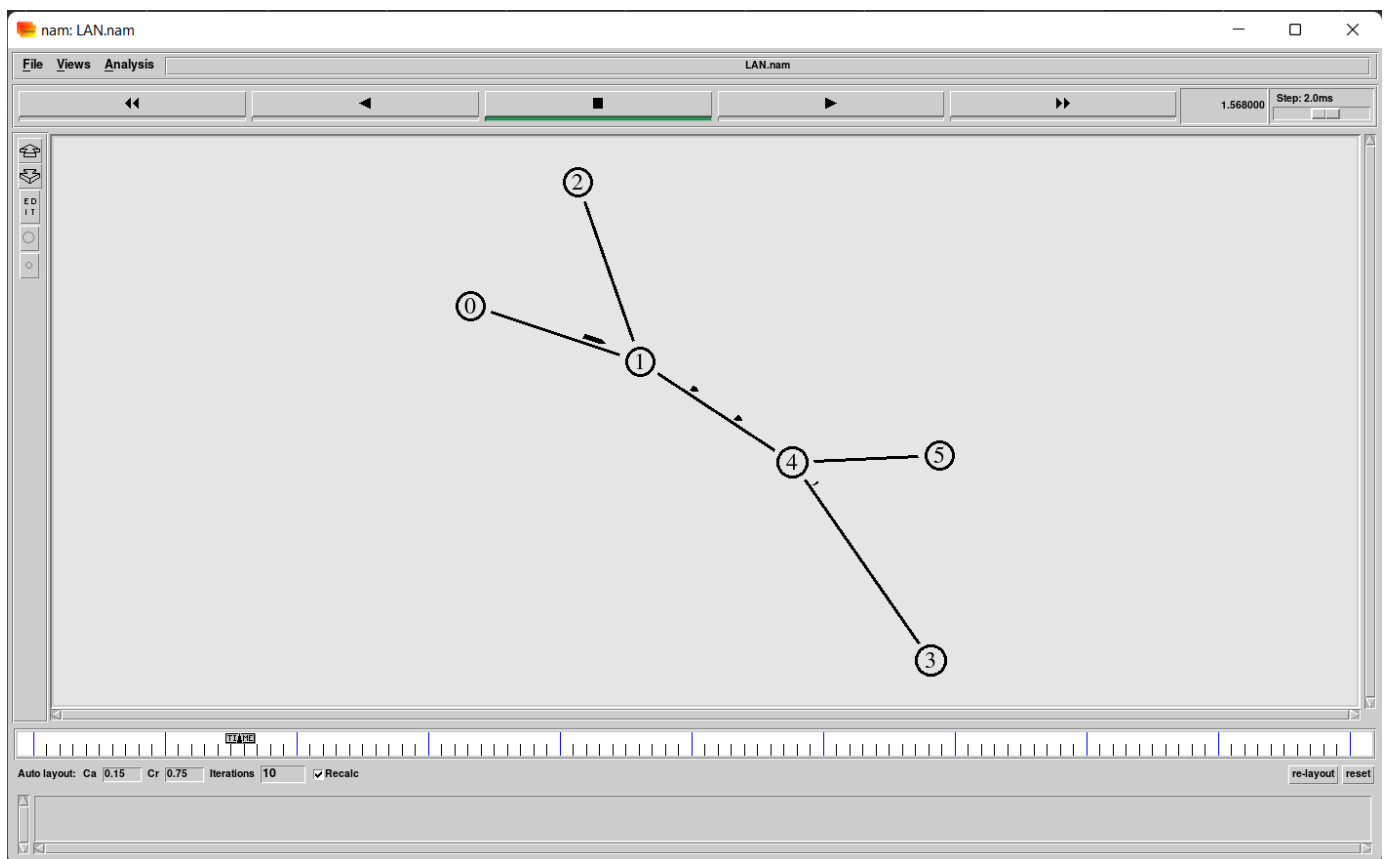
```
sachinraghult@SACHIN:/mnt/c/Users/Sachin Raghul T$ ns lan.tcl
When configured, ns found the right version of tclsh in /usr/bin/tclsh8.6
but it doesn't seem to be there anymore, so ns will fall back on running the first tclsh in your path. The wrong version
of tclsh may break the test suites. Reconfigure and rebuild ns if this is a problem.
LAN Network with 5 nodes
CBR connection UDP packets flow from node0 to node3
FTP connection TCP packets flow from node2 to node5
sachinraghult@SACHIN:/mnt/c/Users/Sachin Raghul T$ nam LAN.nam
```

VISUALIZATION

LAN SETUP



Flow of UDP packets from node0 to node3:



Flow of TCP packets from node2 to node5 and UDP packets from node0 to node3 simultaneously:

