**NS2 Syntax:**

**Create Simulation:** set ns [new Simulator]

**Trace Files for NAM**: set nf [open out.nam w]

$ns namtrace-all $nf

**Finish Procedure:** proc finish {} {

global ns nf

$ns flush-trace

close $nf

exec nam out.nam &

exit 0

}

**Routing Algorithm**: $ns rtproto <protocol\_name>; <protocol\_name>: DV

**Node creation**: set <node\_name> [$ns node]

**Links Creation**: $ns <link\_type> <node1> <node2> <Bandwidth> <Delay> <queue\_type>

<link\_type>: simplex-link, duplex-link; <queue\_type>: DropTail, SFQ

**Graphical Settings (NAM)**: $ns <type> <node1> <node2> <option> <args>

<type> : simplex-link-op, duplex-link-op; <option> : orient, queuePos

**Transport Layer**: set <layer\_name> [new Agent/<agent\_type>]

<agent\_type>: UDP,TCP,Null,TCPSink

**Attaching Transport layer:** $ns attach-agent <node\_name> <layer\_name>

**Connecting Transport layer:** $ns connect <layer\_name> <layer\_name>

**File Transfer Protocol:** set <ftp\_name> [new Application/FTP]

**FTP Attach Agent:** <ftp\_name> attach-agent <layer\_name>

**Constant Bit Rate:** set <cbr\_name> [new Application/Traffic/CBR]

**CBR Attach Agent:** <cbr\_name> attach-agent <layer\_name>

**CBR Parameters:** <cbr\_name>set <parameter> <parameter\_value>

<parameter>: packetSize\_, interval\_, rate\_

**Event Scheduling:** $ns at <time\_frame\_value> “<cbr\_name>/<ftp\_name> <time\_event>”

<time\_event>: start, stop

**Ending Simulation:** $ns at <time\_frame\_value> “finish”

**Run Simulation:** $ns run

**Link Up/Down:** $ns rtmodel-at <time\_frame\_value> <function> <node1> <node2>

<function>: up,down