

6. Set up a 2-node wireless network. Analyze performance for this scenario with DSDV as routing protocol

Save this file as p6.tcl :-

```
set val(chan) Channel/WirelessChannel
set val(prop) Propagation/TwoRayGround
set val(netif) Phy/WirelessPhy
set val(mac) Mac/802_11
set val(ifq) Queue/DropTail/PriQueue
set val(ll) LL
set val(ant) Antenna/OmniAntenna
set val(x) 500
set val(y) 500
set val(ifqlen) 50
set val(nn) 2
set val(stop) 20.0
set val(rp) DSDV

set ns_ [new Simulator]
set tracefd [open 001.tr w]
$ns_ trace-all $tracefd
set namtrace [open 001.nam w]
$ns_ namtrace-all-wireless $namtrace $val(x) $val(y)
set prop [new $val(prop)]
set topo [new Topography]
$topo load_flatgrid $val(x) $val(y)

create-god $val(nn)

$ns_ node-config -adhocRouting $val(rp) \
    -llType $val(ll) \
    -macType $val(mac) \
    -ifqType $val(ifq) \
    -ifqLen $val(ifqlen) \
    -antType $val(ant) \
    -propType $val(prop) \
    -phyType $val(netif) \
    -channelType $val(chan) \
    -topoInstance $topo \
    -agentTrace ON \
    -routerTrace ON \
    -macTrace ON

for {set i 0} {$i < $val(nn)} {incr i} {
    set node_($i) [$ns_ node]
    $node_($i) random-motion 0
}
```

```

for {set i 0} {$i < $val(nn)} {incr i} {
    $ns_ initial_node_pos $node_($i) 40
}

```

```

$ns_ at 1.1 "$node_(0) setdest 310.0 10.0 20.0"
$ns_ at 1.1 "$node_(1) setdest 10.0 310.0 20.0"

```

```

set tcp0 [new Agent/TCP]
set sink0 [new Agent/TCPSink]
$ns_ attach-agent $node_(0) $tcp0
$ns_ attach-agent $node_(1) $sink0
$ns_ connect $tcp0 $sink0
set ftp0 [new Application/FTP]
$ftp0 attach-agent $tcp0

```

```

$ns_ at 1.0 "$ftp0 start"
$ns_ at 18.0 "$ftp0 stop"

```

```

for {set i 0} {$i < $val(nn)} {incr i} {
    $ns_ at $val(stop) "$node_($i) reset";
}

```

```

$ns_ at $val(stop) "puts \"NS EXITING...\"; $ns_ halt"
puts "Starting Simulation..."

```

```

$ns_ run

```

Execution commands:-

- 1)ns p6.tcl
- 2)nam 001.nam

Outputs:-



