

**Roll No: 5117060**

## **EXPERIMENT 09**

### **PROBLEM DEFINITION:**

Relatively simple multicast configuration between two nodes.

#### **Code:**

```
set ns [new Simulator -multicast on]; # enable multicast
routing;

set tracef [open dm.tr w]
$ns trace-all $tracef

set namtracef [open dm.nam w]
$ns namtrace-all $namtracef

set node0 [$ns node]           ;# create multicast capable
nodes;
set node1 [$ns node]

$ns duplex-link $node0 $node1 1.5Mb 10ms DropTail

set mproto DM                  ; # configure multicast protocol;
set mrthandle [$ns mrtproto $mproto]; # all nodes will
contain multicast protocol agents;

set group [Node allocaddr]    ; # allocate a multicast
address;

set udp [new Agent/UDP]       ;# create a source agent
at node 0;
$ns attach-agent $node0 $udp
$udp set dst_addr_ $group
$udp set dst_port_ 0

set cbr [new Application/Traffic/CBR]
$cbr attach-agent $udp

set receiver [new Agent/LossMonitor]; # create a
receiver agent at node 1;
$ns attach-agent $node1 $receiver

$ns at 0.3 "$node1 join-group $receiver $group"
$ns at 2.0 "$node1 leave-group $receiver $group"

$ns at 0.4 "$cbr start"
```

```
$ns at 1.5 "$cbr stop"
```

```
$ns at 5.0 "finish"
```

```
proc finish {} {  
    global ns tracef namtracef  
    $ns flush-trace  
    close $namtracef  
    close $tracef  
    exec nam dm.nam &  
    exit 0  
}  
$ns run
```

### Output:

