

WMS Assignment 2

★ Aim:

write a program to simulate two node wireless network. You may use NetSim or NS2 or QualNet for this experiment.

★ Conclusion:-

Thus we have studied and simulated wireless nodes with ~~no~~ mobility.

★ FAQ's

1) Why propagation model is used in wireless network?

⇒ Both loss can be expressed as the ratio of power of transmitted signal to the power of the same signal received by the receiver on a given path. It is a function of the propagation distance. Estimation of path loss is very important for designing and deploying wireless communication networks.

2) Explain different types of queue object in wireless network.

⇒ A queue object is a general class of object capable of holding and possible marking or discarding packets as they travel through simulated topology. Configuration parameters used for queue objects are:-

- limited: The queue size in packets
- blocked: Set to false by default, this is true if queue is blocked
- maxqueue buckets: There are no state variables associated with this object
- secper byte: There are no state variables associated with the object

Q3 Draw & explain trace File format in wireless network

- There are 12 fields -
- 1) Event or Type Identifier (1)
 - 2) Time at which packet tracing string is created (2)
 - 3) Source & Destination Node id (3-4)
 - 4) Packet name (5)
 - 5) Size of the packet, in bytes (6)
 - 6) Flags - 7 digit flag string (7)
 - 7) Flow id (8)
 - 8) Source and destination address (9-10)
 - 9) Sequence Number (11)
 - 10) Packet Unique ID (12)

event	time	From node	To node	PKT type	time	flag	fid	src addr	dest addr	seq no.	PKT id
-------	------	--------------	------------	-------------	------	------	-----	-------------	--------------	------------	-----------

Q4
 ⇒ What is the role of God?
 God is caused as general operations director. It is the object that is used to store global information about the state of environment, network or nodes that an omniscient observer would have, but that should not be made known to any participant in the stimulation.

Q5
 ⇒ How to deal with a very large trace files?
 Large trace files are generated after the data extraction. After extraction files may be deleted. If don't want to delete we can use Moca console.
 Once monthly we run a report of which we have nearly 1,00,000 records. It takes a long time and performance is very slow when we run this report.

- When I run a SQL trace for the session for the schema in which the report is executed, the size of trace files becomes very big and SQL put off the SQL Trace.
- You can always form a partial trace file with the report and resulting report may solve the problem.