

Computer Networks Lab Assignment 1

Objective: Introduction to Network Simulator - OMNeT++

Tasks1: Installation of OMNeT++

1. Download the OMNeT++ from below given link
<https://omnetpp.org/omnetpp/category/30-omnet-releases>
or from computer lab 1 website
2. Install of the simulator as specified in install guide at given below link
<https://omnetpp.org/doc/omnetpp/InstallGuide.pdf>
3. Test the tictoc network simulation as specified in the
<http://www.omnetpp.org/doc/omnetpp/tictoc-tutorial/>

Tasks2:

1. Start OMNeT++ IDE by “omnetpp” command
2. Create your workspace in home directory
3. Switch to your workspace
4. Create new “OMNeT++ project” with name “lab1”

Task 3:

1. Create a network (name “twoNode”) with two nodes

[Node1] -- [Node2]

2. Create message with four fields: Id, Type of message (Data or Ack), Source Address and Destination Address
3. Node1 sends 10 “Data” messages with id 1 to 10 to Node2. Node2 receives each “Data” message and send back “Ack” message with same id as received “Data” message id to the Node1. After receiving “Ack” message Node1 sends the next message.

e.g.

	[Node1]	----	[Node2]
t1	“Data” --> (send)		
t2			“Data” (receive)
t3			<---“Ack” (send)
t4	“Ack” (receive)		