METHODOLOGY

In the beginning of research work firstly try to understand DTN architecture and find out the suitable simulator among the various simulators such as OMNeT++, NS2, NS3, ONE and JAVA which can used to achieve the above cited objectives.

Most of the researchers used the ONE simulator for the implementation of DTN routing protocol. So in this research work I have been selected the ONE simulator of Delay Tolerant Network routing protocols.

ONE is an agent-based discrete event simulation engine. At each simulation step the engine updates a number of modules that implement the main simulation functions. The main functions of the ONE simulator are the modeling of node movement, inter-node contacts using various interfaces, routing, message handling and application interactions. Result collection and analysis are done through visualization, reports and post-processing tools. The elements and their interactions are shown in Figure 2.

![Figure 2. Overview of the ONE simulation environment.](image-url)
PLANNING OF WORK

• Introduction.
• Literature Survey.
• Selection of simulator among various simulators like OMNeT++, NS2, NS3, ONE Simulator (JAVA) which can use to achieve the above cited objectives.
• Installation of One Simulator and understand the simulation process.
• Study of existing routing protocols of Delay Tolerant Network (DTN).
• Study of buffer optimization techniques of Delay Tolerant Network (DTN).
• Find out the research gaps form the literature survey and form the above cited studies.
• On the basis of research gap, propose the new technique for buffer optimization and social based routing protocol.
• Implementation of proposed technique in ONE Simulator.
• Analysis of existing and proposed technique.