

Fig. 5. System Architecture

VI. MODULES

- 1) Service Provider
- 2) BGP Router
- 3) Overlay Router
- 4) End User

Service Provider:-

- In this module, the Service Provider calculates the shortest path from Source to Destination.
- The shortest-path routing over the Internet BGP-based router.
- The Service provider browses the required file and uploads their data files and delivered to the particular end user which is selected by user(A, B, C, D) and with their DIP (Destination IP) of End User.

BGP Router:-

- The BGP Router is responsible to route the nodes using BGP routing.
- By Finding a minimal number of relay node locations by this it can allow shortest -path routing between the source to destination
- BGP Router considers a one-to-many destination.

Overlay Router:-

- The Overlay Router is responsible to route the file to the specified destination.
- Finding a minimal path to the destination using overlay routing, one can perform routing via shortest paths.
- Nodes in the overlay network can be connected by dynamically or logical links, for each of which corresponds to a path, and through many physical links, in the underlying network.

End User (Destination):-

- In this module, the End user (Node A, Node B, Node C, Node D) is responsible to receive the file from the Service Provider.
- End User receives file from a single source to destination (Node A, Node B, Node C, Node D).

VII. RESULTS

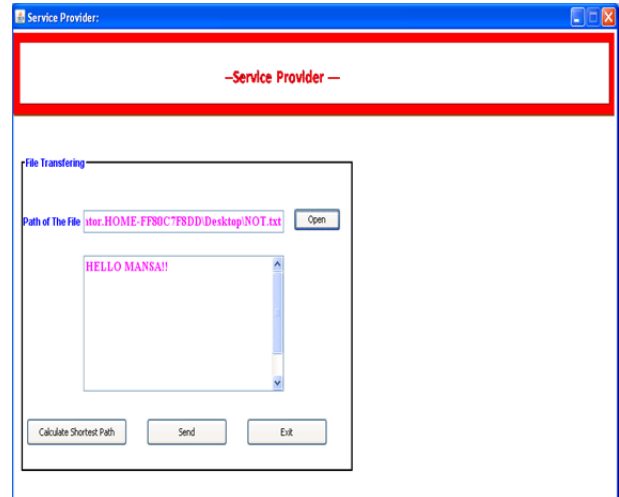


Fig. 6. Service Provider

- Browse the File and upload the from specified directory.
- Calculate the Shortest path and enter the IP Address of router.
- Select the Source and Destination Node for sending the messages.

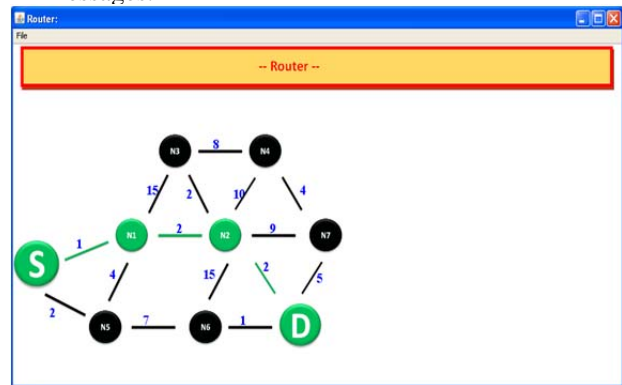


Fig. 7. Router

- In this router, we assign the cost for nodes and View the cost of nodes.
- Send the data from source to destination according to the shortest path

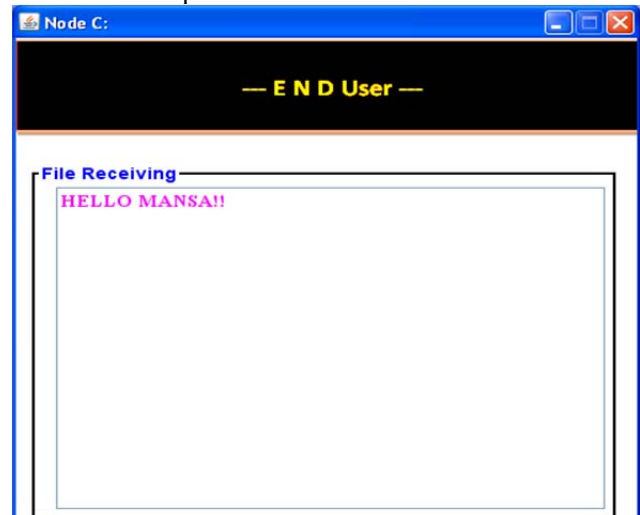
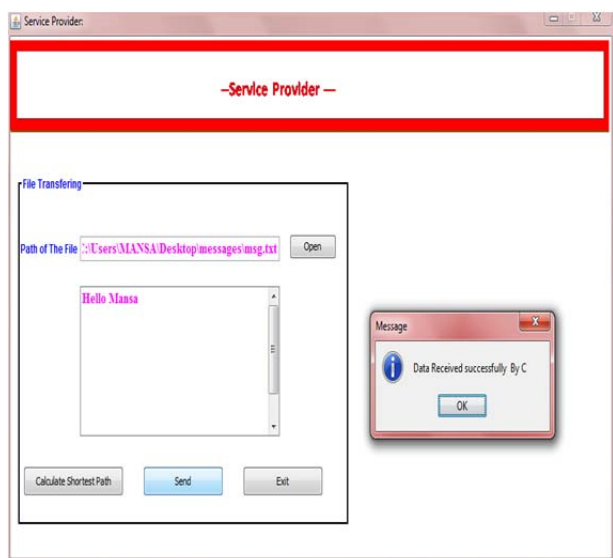


Fig. 8. Nodes

- This is the window which is displayed the message and this node is considered as the destination.
- This is the Destination Window which displays the message.



**Fig. 9. Data Received**

After successful message is delivered to destination it displays the window.

#### CONCLUSION & FUTURE WORK

The goal of this paper was to reduce the number of infrastructure nodes that need to be added in order to maintain a specific property in the overlay routing. And no need to redesign the network, finding a minimal number of nodes and it determines the shortest path routing between the source and destination by this performance we can reduce the cost for using the overlay infrastructure. We use overlay routing to improve network performance. This

infrastructure may be applicable in applications for better performance.

This work can be extended to the real time network which consists of more number of nodes. In this paper we choose only Text Documents.

In Future we will choose the Multimedia along with Text documents.

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