II. INTERACTION OF THE CODE AND THE NETWORK

This section of the paper provides an overview of the interaction between the code and the network. The network structure is complex and the code must adapt to the changing conditions of the network. The code must be able to adjust its parameters in real-time to optimize performance. The network provides the necessary feedback to the code, allowing it to make informed decisions. The code must also be able to handle various network conditions, such as congestion and loss, to ensure reliable transmission.

A. Packetization

The first step in the interaction is packetization. The code takes the incoming data and divides it into packets, each of which is sent through the network. The packets are prioritized based on their importance and are transmitted according to the network's conditions. The packets are then combined at the destination to form the original data.

B. Channel Coding

The channel coding process is performed by the code to protect the packets from errors and errors. The code adds redundancy to the packets, which allows the receiver to detect and correct errors. The level of redundancy is determined by the channel conditions.

C. Flow Control

Flow control is used to prevent congestion in the network. The code uses a window-based method to control the rate at which packets are sent. This ensures that the network is not overwhelmed with packets, which can cause delays and errors.

D. Error Recovery

In the event of an error, the code uses error recovery techniques to retransmit the packets. This ensures that the data is delivered accurately and reliably.
REFERENCES


