

TEMPOROSPATIAL SOFTWARE-DEFINED NETWORKING FOR NGSO SATELLITE NETWORKS

ABSTRACT

The disclosure provides for a system that includes a network controller. The network controller is configured to receive information from nodes of a network, where nodes include one node that is in motion relative to another node. The network controller is also configured to generate a table representing available nodes and possible links in the network based on the information, and determine a topology of the network based on the table. Additionally, the network controller is configured to receive client data information from a client device, and determine flows for the topology based on the client data information. Each flow includes one or more requirements for a routing path through the network. The network controller is configured to generate a network configuration for the topology based on the flows, and send instructions to the nodes of the network for implementing the network configuration and transmitting client data.

FIGURE 8