Simulation Introduction

Basic simulation configuration for satellite network.

Topology Configuration

Satellite number: 20*10

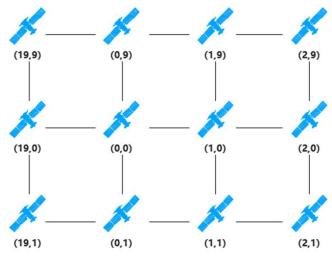
Inclination degree: 65°

Altitude: 700km

• Link bandwidth: 100Mbps

Ground Stations: Shanghai、

Nanjing Los Angeles



(Orbit Number, Satellite Number in Orbit)

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IETF Hackathon: Satellite Network

Simulation Introduction

Basic simulation configuration for satellite network.

Traffic Configuration:

Simulation time: 300 seconds

Transport layer protocol: UDP

Sending rate: 2Mbps

Max queue size: 100 pkts

Source: Ground Station in Shanghai

Destination: Ground Station in Los Angeles

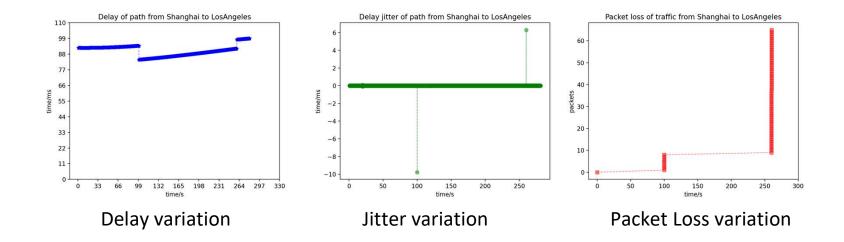
Routing protocols: OSPF



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Demo & Result

- Result1: Visualization of QoS Data.
 - There is a ISL interruption at the 100 seconds and a GSL switching at the 260 seconds.



The ISL interruption and GSL switching will result in the huge delay jitter and packet loss.

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Demo & Result

• Result2: Visualization of path switching.

