

QOS IN IP TELEPHONY

SANOG 25, KANDY, SRI LANKA

WHY WE NEED QOS?

To ensure clear and uninterrupted voice in case of :

- Packet loss
- Delayed packet
- Jitter
- Latency
- Error

In another word giving higher priority to Voice packets over other data packets

QOS SOLUTIONS

Best solution is

- Have a bigger pipe
- Have best possible transit and peering
- Follow best practices
- Secure your network
- Use good network management and monitoring tools

And live happily with other services

STILL NEED QOS

Three things we need to take care:

- Classification
- Queuing
- Network provisioning

CLASSIFICATION

IPv4 header(ToS):

Modern redefinition of ToS:

Differential Service Code Point (DSCP)

Explicit Congestion Notification (ECN)

QUEUING

Queuing tools assign a packet or flow to one of several queues, based on classification, for appropriate treatment in the network

NETWORK PROVISIONING

Network Provisioning tools accurately calculate the required bandwidth needed for voice conversations, all data traffic, any video applications, and necessary link management overhead such as routing protocols

FOR DETAIL READING

Qos Configuration Guide:

<http://www.net130.com/tutorial/cisco-pdf/IP%20telephony%20Qos%20design%20Guide.pdf>

Thank you

