HO QOS Enablement – Proposed Setup

HO SERVERS

Data Center Switch
Cisco 6509-E

DATA CENTER SWITCH w/ FWSM Module
FWSM also act as L3 for all Internal Servers

1. Classification & Marking of Server Traffic

MPLS CLOUD INTRANET

[30mb/s] Service Provider 1
MPLS BACK-HAUL L3 VPN

[30mb/s] Service Provider 2
MPLS BACK-HAUL L3 VPN

G2/0/24

Aggregator Switch

G1/0/24

7206VXR: **STC & Mobily Link**
R2

G0/1 Gi0/2

G0/3

7204VXR
RHO_VPN2_RTR

Gi0/2   G0/1   L3

G5/4

CORE WAN ROUTERS

VPN TERMINATION ROUTERS

CORE/ DESTRIBUTION SWITCH

L2 TRUNK LINK
Trust DSCP (QOS)

Access Switch

G0/1 Gi0/2

G0/3

7206VXR:**ITC, NN & Radio Link**

7204VXR
RHO_VPN1_RTR

Gi0/2   G0/1   L3

G5/10

Trust Boundary

CORE WAN ROUTER

Int g0/1.450 – example policy output
Description SP1 MPLS backhaul Link
service-policy output Test.Traffic

Classification & Marking
Voice = match DSCP EF setting
Business Priority Traffic (High) = DSCP set to AF31
Business Priority Traffic (Low) = DSCP set to AF21
Scavenger Traffic = DSCP set to Cs1
QUEUING
Voice = Priority Queuing (LLQ)
Business Priority Traffic (High) = CBWFQ (BW Guarantee)
Business Priority Traffic (Low) = CBWFQ (BW Guarantee)
Scavenger Traffic = No BW Guarantee + Red
Best Effort = Default + RED
POLICING
Voice = Exceed Packet: Drop -> CAC
Data = Exceed Packet: Remark

VPN TERMINATION ROUTER

Tunnel Interfaces
Add "qos pre-classify"

ACCESS SWITCH

Traffic Classification & Marking
IP Phone = DSCP set to ef
Call Signaling = DSCP set to cs3

CORE/DISTRIBUTION SWITCH "Cisco 6509-E"

1. DSCP to queuing mapping