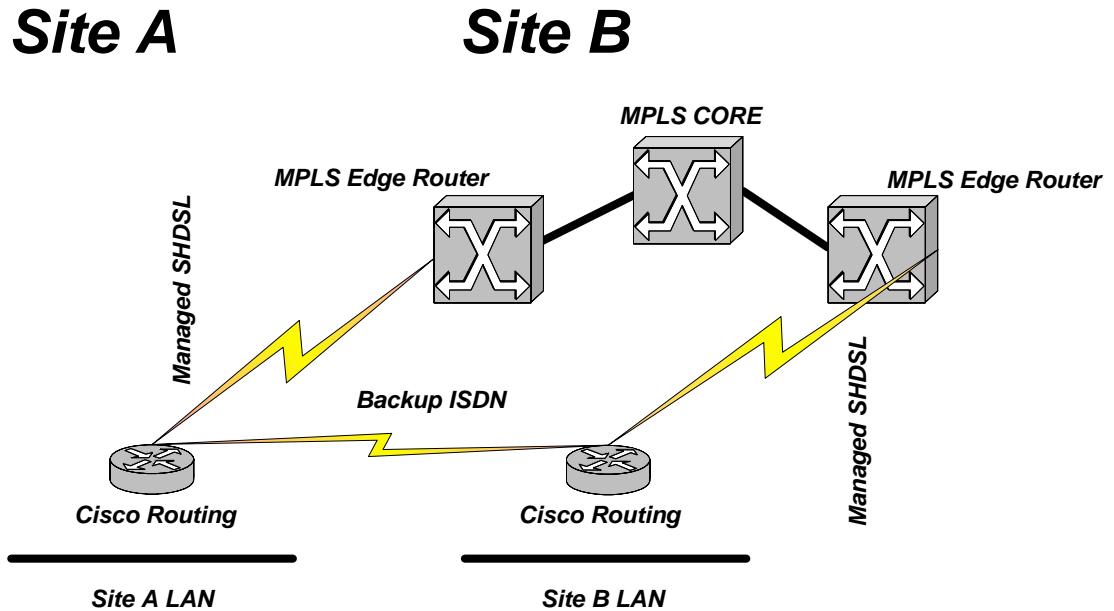


**Test Note – MPLS Environment example with DSCP
and Signaling configured in Cisco Routers for IP
Office based VoIP and Signaling Streams.**

PLEASE NOTE THESE CONFIGURATIONS ARE CONFIGURED SPECIFICALLY FOR USE WITH THE CARRIER THAT IMPLEMENTED THIS SOLUTION, PLEASE ONLY USE THESE CONFIGURATIONS AS A REFERENCE POINT. CONNECTIONS WERE MANAGED SHDSL 512/512 INTO A MPLS CORE CONFIGURED FOR VOICE AND DATA WITH ISDN BACKUP ROUTERS WERE CISCO 828'S. SERVICE WAS MANAGED END TO END.

Network Diagram



Site A Router Configuration.

```

Site_A#sh run
Building configuration...

Current configuration : 2295 bytes
version 12.2
no service pad
service timestamps debug uptime
service timestamps log uptime
service password-encryption
hostname Site_1
!
logging queue-limit 100
logging buffered 10000 debugging
no logging console
enable secret <Removed>
!
clock timezone EST 10
ip subnet-zero
no ip domain lookup
!
ip cef
!
class-map match-any voice-signaling
match access-group 106
class-map match-any voice-udp
description Class Mapping for VoIP

```

```
match access-group 101
!
policy-map voice-qos
description VoIP QoS
class voice-udp
priority 200
class voice-signaling
bandwidth 16
class class-default
fair-queue
!
interface Ethernet0
description Site A LAN
ip address 10.10.10.254 255.255.255.0
no keepalive
hold-queue 100 out
!
interface ATM0
no ip address
no atm ilmi-keepalive
dsl equipment-type CPE
dsl operating-mode GSHDSL symmetric annex B
dsl linerate AUTO
!
interface ATM0.3 point-to-point
description Internet Network
pvc 1/34
vbr-rt 512 512 1
tx-ring-limit 3
encapsulation aal5mux ppp dialer
dialer pool-member 3
service-policy output voice-qos
!
interface Dialer3
description Internet Network
bandwidth 512
ip address negotiated
service-policy output voice-qos
encapsulation ppp
dialer pool 3
dialer-group 1
ppp authentication chap callin
ppp chap hostname <Removed>
ppp chap password <Removed>
!
ip classless
ip route 0.0.0.0 0.0.0.0 10.10.10.3
ip route 10.0.0.0 255.0.0.0 Dialer3
ip route 192.168.0.0 255.255.0.0 Dialer3
no ip http server
!
access-list 101 permit udp any any dscp ef
access-list 106 permit tcp any eq 1720 any
access-list 106 permit tcp any any eq 1720
access-list 106 permit tcp any eq 1719 any
access-list 106 permit tcp any any eq 1719
access-list 106 permit udp any eq 50795 any
access-list 106 permit udp any any eq 50795

dialer-list 1 protocol ip permit
snmp-server community <Removed> RO
snmp-server enable traps tty
line con 0
exec-timeout 2 0
password <Removed>
login
stopbits 1
line vty 0 4
password <Removed>
login
scheduler max-task-time 5000
end
```

Site B Router Configuration

```
Site_B#sh run
Building configuration...

Current configuration : 1983 bytes
!
version 12.2
no service pad
service timestamps debug uptime
service timestamps log uptime
service password-encryption
!
hostname Site_2
!
logging queue-limit 100
logging buffered 10000 debugging
no logging console
enable secret <Removed>
!
clock timezone EST 10
ip subnet-zero
no ip domain lookup
!
ip cef
!
class-map match-any voice-signaling
 match access-group 106
class-map match-any voice-udp
 description Class Mapping for VoIP
 match access-group 101
!
policy-map voice-qos
 description VoIP QoS
 class voice-udp
  priority 200
 class voice-signaling
  bandwidth 16
 class class-default
  fair-queue
!
interface Ethernet0
 description Site B LAN
 ip address 10.10.20.254 255.255.255.0
 no keepalive
 hold-queue 100 out
!
interface ATM0
 no ip address
 no atm ilmi-keepalive
 dsl equipment-type CPE
 dsl operating-mode GSHDSL symmetric annex B
 dsl linerate AUTO
!
interface ATM0.3 point-to-point
 description Internet Network
 pvc 1/34
 vbr-rt 512 512 1
 tx-ring-limit 3
 encapsulation aal5mux ppp dialer
 dialer pool-member 3
 service-policy output voice-qos
!
interface Dialer3
 description Internet Network
 bandwidth 512
 ip address negotiated
 service-policy output voice-qos
 encapsulation ppp
 dialer pool 3
 dialer-group 1
 ppp authentication chap callin
 ppp chap hostname <Removed>
 ppp chap password <Removed>
```

```
!  
ip classless  
ip route 0.0.0.0 0.0.0.0 Dialer3  
no ip http server  
!  
access-list 101 permit udp any any dscp ef  
access-list 106 permit tcp any eq 1720 any  
access-list 106 permit tcp any any eq 1720  
access-list 106 permit tcp any eq 1719 any  
access-list 106 permit tcp any any eq 1719  
access-list 106 permit udp any eq 50795 any  
access-list 106 permit udp any any eq 50795  
  
dialer-list 1 protocol ip permit  
snmp-server community <Removed> RO  
snmp-server enable traps tty  
!  
line con 0  
exec-timeout 2 0  
password <Removed>  
login  
stopbits 1  
line vty 0 4  
password <Removed>  
login  
!  
scheduler max-task-time 5000  
end
```

For further information regarding Cisco configurations please refer to <http://www.cisco.com>