Call Flow Components Configuration Commands

This appendix provides a few sample configuration commands for Cisco Unified Communications System Release 5.0 components that are involved in the call flows discussed in Chapter 4, "Tested Call Flows". The configuration commands are listed by the type of call flow the components are involved with and are site-specific and site-relevant.

Sample configuration commands for general infrastructure components such as gateways, switches and routers deployed at the various test sites are similar to those listed for IPT components in the *System Architecture Reference Manual for IP Telephony* at: http://www.cisco.com/univercd/cc/td/doc/systems/unified/unified1/starmipt/index.htm

Site-specific physical and logical topology maps are provided in Chapter 2, "Test Deployment Models and Sites".

This topic contains the following sections:

- Test Bed 1 Call Flows
- Test Bed 2 Call Flows

Test Bed 1 Call Flows

Cisco Unified CallManager Post-Routed Call Flow Components

Listed in this section are configuration commands for some of the components that are involved in handling the Cisco Unified CallManager (Unified CallManager) Post-Routed call flow in Test Bed 1:

- Site1 Cisco 3600 Gatekeeper3 (also used in the Parent/Child call flow)
- Site4 Cisco 5850 Gateway1
- Site5 Cisco Communications Media Module Gateway1

Site1 Cisco 3600 Gatekeeper3

```
version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname CS1-3660-GK3
!
```

```
boot-start-marker
boot system flash:c3660-jsx-mz.124-5.13.T4
boot-end-marker
!
logging buffered 1000000 debugging
enable password any
!
no aaa new-model
!
resource policy
!
clock timezone EST -5
clock summer-time EDT recurring
!
!
ip cef
ip domain name rtp.com
ip name-server 10.12.3.67
ip name-server 10.12.6.67
!
!
interface FastEthernet0/0
 ip address 10.12.3.103 255.255.255.240
 speed 100
 full-duplex
!
interface FastEthernet0/1
 ip address 10.12.1.165 255.255.255.0
 speed 100
 full-duplex
!
ip http server
ip route 0.0.0.0 0.0.0.0 10.12.6.97
ip route 0.0.0.0 0.0.0.0 10.12.3.97
!
!
snmp-server community public RO
snmp-server community private RW
snmp-server enable traps snmp authentication linkdown linkup coldstart warmstart
snmp-server enable traps vrrp
snmp-server enable traps ds1
snmp-server enable traps tty
snmp-server enable traps eigrp
snmp-server enable traps casa
snmp-server enable traps gatekeeper
snmp-server enable traps xgcp
snmp-server enable traps isdn call-information
snmp-server enable traps isdn layer2
snmp-server enable traps isdn chan-not-avail
snmp-server enable traps isdn ietf
snmp-server enable traps icsudsu
snmp-server enable traps ds3
snmp-server enable traps hsrp
snmp-server enable traps config
snmp-server enable traps entity
snmp-server enable traps cpu threshold
snmp-server enable traps config-copy
snmp-server enable traps flash insertion removal
snmp-server enable traps envmon
snmp-server enable traps ds0-busyout
snmp-server enable traps ds1-loopback
snmp-server enable traps bgp
snmp-server enable traps ospf state-change
snmp-server enable traps ospf errors
```

```
snmp-server enable traps ospf retransmit
snmp-server enable traps ospf lsa
snmp-server enable traps ospf cisco-specific state-change nssa-trans-change
snmp-server enable traps ospf cisco-specific state-change shamlink interface-old
snmp-server enable traps ospf cisco-specific state-change shamlink neighbor
snmp-server enable traps ospf cisco-specific errors
snmp-server enable traps ospf cisco-specific retransmit
snmp-server enable traps ospf cisco-specific lsa
snmp-server enable traps pim neighbor-change rp-mapping-change invalid-pim-message
snmp-server enable traps ipmulticast
snmp-server enable traps mvpn
snmp-server enable traps msdp
snmp-server enable traps rsvp
snmp-server enable traps frame-relay
snmp-server enable traps frame-relay subif
snmp-server enable traps syslog
snmp-server enable traps rtr
snmp-server enable traps bulkstat collection transfer
snmp-server enable traps mpls ldp
snmp-server enable traps mpls traffic-eng
snmp-server enable traps mpls vpn
snmp-server enable traps cnpd
snmp-server enable traps stun
snmp-server enable traps dlsw
snmp-server enable traps bstun
snmp-server enable traps pppoe
snmp-server enable traps l2tun session
snmp-server enable traps atm subif
snmp-server enable traps dial
snmp-server enable traps dsp card-status
snmp-server enable traps dsp oper-state
snmp-server enable traps ipmobile
snmp-server enable traps vtp
snmp-server enable traps vsimaster
snmp-server enable traps event-manager
snmp-server enable traps voice
snmp-server enable traps dnis
snmp-server enable traps ccme
snmp-server enable traps srst
snmp-server host 10.12.6.70 public
!
!
control-plane
!
!
gatekeeper
 zone local CS1-CCM-ZONE rtp.com 10.12.3.103
 zone local DC-CCM-ZONE rtp.com
 zone local CS5-CCM-ZONE rtp.com
 zone local DC-GW-ZONE rtp.com
 zone cluster local GUP CS1-CCM-ZONE
  element CS4-CCM-ZONE 10.12.6.103 1719
 !
 zone cluster remote CS9-GK1 bxb.com
  element CS9-3660-GK1 10.12.10.99 1719
 !
 zone prefix CS1-CCM-ZONE 21.... gw-priority 10 CS4-CM6-TRK_7 CS4-CM5-TRK_6
 zone prefix CS1-CCM-ZONE 21.... gw-priority 5 CS1-CM2-TRK_3 CS1-CM1-TRK_1
 zone prefix CS1-CCM-ZONE 21.... gw-priority 0 CS4-5850-GW1
 zone prefix CS1-CCM-ZONE 22.... gw-priority 10 CS4-CM6-TRK_7 CS4-CM5-TRK_6
 zone prefix CS1-CCM-ZONE 22.... gw-priority 5 CS1-CM2-TRK_3 CS1-CM1-TRK_1
 zone prefix CS1-CCM-ZONE 22.... gw-priority 0 CS4-5850-GW1
 zone prefix CS1-CCM-ZONE 23.... gw-priority 10 CS4-CM6-TRK_7 CS4-CM5-TRK_6
 zone prefix CS1-CCM-ZONE 23.... gw-priority 5 CS1-CM2-TRK_3 CS1-CM1-TRK_1
```

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```
zone prefix CS1-CCM-ZONE 23.... gw-priority 0 CS4-5850-GW1
zone prefix CS1-CCM-ZONE 24.... gw-priority 10 CS4-CM6-TRK_7 CS4-CM5-TRK_6
zone prefix CS1-CCM-ZONE 24.... gw-priority 5 CS1-CM2-TRK_3 CS1-CM1-TRK_1
zone prefix CS1-CCM-ZONE 24.... gw-priority 0 CS4-5850-GW1
zone prefix CS5-CCM-ZONE 25....
zone prefix CS5-CCM-ZONE 26....
zone prefix CS9-GK1 39....
zone prefix DC-GW-ZONE 919*
zone prefix DC-GW-ZONE 9.........
gw-type-prefix 1#* default-technology
no shutdown
!
!
line con 0
line aux 0
line vty 0 4
 password any
 login
!
ntp clock-period 17180213
ntp server 10.12.3.98
!
end
```

Site4 Cisco 5850 Gateway1

```
version 12.4
no service pad
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname CS4-5850-GW1
!
boot-start-marker
boot system flash c5850tb-p9-mz.124-5.13.T4
boot-end-marker
!
!
redundancy
 mode classic-split
logging buffered 10000000 debugging
enable password any
!
no aaa new-model
!
resource policy
!
!
resource-pool disable
clock timezone EST -5
clock summer-time EDT recurring
spe default-firmware spe-firmware-1
ip cef distributed
ip domain name rtp.com
ip name-server 10.12.6.67
ip name-server 10.12.3.67
!
!
isdn switch-type primary-dms100
!
!
```

```
voice service voip
 fax protocol t38 ls-redundancy 0 hs-redundancy 0 fallback none
 h323
 modem passthrough none codec g729r8 pre-ietf
!
!
voice class codec 711
 codec preference 1 g729r8
 codec preference 2 g711ulaw
!
!
voice statistics type csr
voice statistics time-range since-reset
!
!
controller T3 0/0
 cablelength 224
 t1 1-18 controller
!
controller T1 0/0:1
 framing esf
 pri-group timeslots 1-24
!
controller T1 0/0:2
 framing esf
 pri-group timeslots 1-24
!
controller T1 0/0:3
 framing esf
 pri-group timeslots 1-24
!
controller T1 0/0:4
 framing esf
 pri-group timeslots 1-24
!
controller T1 0/0:5
 framing esf
 pri-group timeslots 1-24
!
controller T1 0/0:6
 framing esf
 pri-group timeslots 1-24
!
controller T1 0/0:7
 framing esf
 pri-group timeslots 1-24
!
controller T1 0/0:8
 framing esf
 pri-group timeslots 1-24
!
controller T1 0/0:9
 framing esf
 pri-group timeslots 1-24
!
controller T1 0/0:10
 framing esf
 pri-group timeslots 1-24
!
controller T1 0/0:11
 framing esf
 pri-group timeslots 1-24
!
controller T1 0/0:12
```

```
 framing esf
 pri-group timeslots 1-24
!
controller T1 0/0:13
 framing esf
 pri-group timeslots 1-24
!
controller T1 0/0:14
 framing esf
 pri-group timeslots 1-24
!
controller T1 0/0:15
 framing esf
 pri-group timeslots 1-24
!
controller T1 0/0:16
 framing esf
 pri-group timeslots 1-24
!
controller T1 0/0:17
 framing esf
 pri-group timeslots 1-24
!
controller T1 0/0:18
 framing esf
 pri-group timeslots 1-24
!
!
interface FastEthernet6/0
 ip address 10.12.6.106 255.255.255.240
 no ip route-cache cef
 no ip route-cache distributed
 no ip route-cache
 logging event link-status
 speed 100
 full-duplex
 h323-gateway voip interface
 h323-gateway voip id CS4-CCM-ZONE ipaddr 10.12.6.103 1719
 h323-gateway voip h323-id CS4-5850-GW1
 h323-gateway voip tech-prefix 1#
!
interface GigabitEthernet6/0
 no ip address
 logging event link-status
 shutdown
 negotiation auto
!
interface FastEthernet6/1
 ip address 10.12.1.144 255.255.255.0
 no ip route-cache cef
 no ip route-cache distributed
 no ip route-cache
 logging event link-status
 speed 100
 full-duplex
!
interface GigabitEthernet6/1
 no ip address
 logging event link-status
 shutdown
 negotiation auto
!
interface Serial0/0:1:23
 no ip address
```

```
 encapsulation hdlc
 isdn switch-type primary-ni
 isdn incoming-voice modem
 no cdp enable
!
interface Serial0/0:2:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-ni
 isdn incoming-voice modem
 no cdp enable
!
interface Serial0/0:3:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-ni
 isdn incoming-voice modem
 no cdp enable
!
interface Serial0/0:4:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-ni
 isdn incoming-voice modem
 no cdp enable
!
interface Serial0/0:5:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-ni
 isdn incoming-voice modem
 no cdp enable
!
interface Serial0/0:6:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-ni
 isdn incoming-voice modem
 no cdp enable
!
interface Serial0/0:7:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-ni
 isdn incoming-voice modem
 no cdp enable
!
interface Serial0/0:8:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-ni
 isdn incoming-voice modem
 no cdp enable
!
interface Serial0/0:9:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial0/0:10:23
 no ip address
 encapsulation hdlc
```

```
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial0/0:11:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial0/0:12:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial0/0:13:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial0/0:14:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial0/0:15:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial0/0:16:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial0/0:17:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial0/0:18:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Group-Async0
 no ip address
 encapsulation slip
 group-range 0/00 5/323
```

```
!
!
ip route 0.0.0.0 0.0.0.0 10.12.6.97
no ip http server
!
!
snmp-server community public RO
snmp-server community private RW
snmp-server enable traps snmp authentication linkdown linkup coldstart warmstart
snmp-server enable traps vrrp
snmp-server enable traps calltracker
snmp-server enable traps ds1
snmp-server enable traps tty
snmp-server enable traps eigrp
snmp-server enable traps xgcp
snmp-server enable traps ds3
snmp-server enable traps isdn call-information
snmp-server enable traps isdn layer2
snmp-server enable traps isdn chan-not-avail
snmp-server enable traps isdn ietf
snmp-server enable traps fru-ctrl
snmp-server enable traps flash insertion removal
snmp-server enable traps hsrp
snmp-server enable traps config
snmp-server enable traps entity
snmp-server enable traps cpu threshold
snmp-server enable traps config-copy
snmp-server enable traps envmon
snmp-server enable traps aaa_server
snmp-server enable traps rf
snmp-server enable traps ospf state-change
snmp-server enable traps ospf errors
snmp-server enable traps ospf retransmit
snmp-server enable traps ospf lsa
snmp-server enable traps ospf cisco-specific state-change nssa-trans-change
snmp-server enable traps ospf cisco-specific state-change shamlink interface-old
snmp-server enable traps ospf cisco-specific state-change shamlink neighbor
snmp-server enable traps ospf cisco-specific errors
snmp-server enable traps ospf cisco-specific retransmit
snmp-server enable traps ospf cisco-specific lsa
snmp-server enable traps pim neighbor-change rp-mapping-change invalid-pim-message
snmp-server enable traps ipmulticast
snmp-server enable traps dial
snmp-server enable traps dsp card-status
snmp-server enable traps dsp oper-state
snmp-server enable traps ds0-busyout
snmp-server enable traps ds1-loopback
snmp-server enable traps health-monitor
snmp-server enable traps bgp
snmp-server enable traps syslog
snmp-server enable traps memory bufferpeak
snmp-server enable traps voice
snmp-server enable traps dnis
snmp-server host 10.12.6.70 public
!
!
control-plane
!
!
!
voice-port 0/0:1:D
!
voice-port 0/0:2:D
!
```

```
voice-port 0/0:3:D
!
voice-port 0/0:4:D
!
voice-port 0/0:5:D
!
voice-port 0/0:6:D
!
voice-port 0/0:7:D
!
voice-port 0/0:8:D
!
voice-port 0/0:9:D
!
voice-port 0/0:10:D
!
voice-port 0/0:11:D
!
voice-port 0/0:12:D
!
voice-port 0/0:13:D
!
voice-port 0/0:14:D
!
voice-port 0/0:15:D
!
voice-port 0/0:16:D
!
voice-port 0/0:17:D
!
voice-port 0/0:18:D
!
!
dial-peer voice 1 voip
 destination-pattern 2.....
 session target ras
 dtmf-relay h245-signal h245-alphanumeric
!
dial-peer voice 1000 pots
 incoming called-number 2.....
 no digit-strip
 direct-inward-dial
 port 0/0:1:D
!
dial-peer voice 2 voip
 session target ras
 incoming called-number 919472....
 dtmf-relay h245-signal h245-alphanumeric
!
dial-peer voice 1001 pots
 destination-pattern 919472....
 no digit-strip
 direct-inward-dial
 port 0/0:1:D
!
dial-peer voice 1002 pots
 incoming called-number 2.....
 direct-inward-dial
 port 0/0:2:D
!
dial-peer voice 1003 pots
 incoming called-number 2.....
 direct-inward-dial
 port 0/0:3:D
```

```
!
dial-peer voice 1004 pots
 incoming called-number 2.....
 direct-inward-dial
 port 0/0:4:D
!
dial-peer voice 1005 pots
 incoming called-number 2.....
 direct-inward-dial
 port 0/0:5:D
!
dial-peer voice 1006 pots
 incoming called-number 2.....
 direct-inward-dial
 port 0/0:6:D
!
dial-peer voice 1007 pots
 incoming called-number 2.....
 direct-inward-dial
 port 0/0:7:D
!
dial-peer voice 1008 pots
 incoming called-number 2.....
 direct-inward-dial
 port 0/0:8:D
!
dial-peer voice 1009 pots
 incoming called-number 2.....
 direct-inward-dial
 port 0/0:9:D
!
dial-peer voice 1010 pots
 incoming called-number 2.....
 direct-inward-dial
 port 0/0:10:D
!
dial-peer voice 1011 pots
 incoming called-number 2.....
 direct-inward-dial
 port 0/0:11:D
!
dial-peer voice 1012 pots
 incoming called-number 2.....
 direct-inward-dial
 port 0/0:12:D
!
dial-peer voice 1013 pots
 incoming called-number 2.....
 direct-inward-dial
 port 0/0:13:D
!
dial-peer voice 1014 pots
 incoming called-number 2.....
 direct-inward-dial
 port 0/0:14:D
!
dial-peer voice 1015 pots
 incoming called-number 2.....
 direct-inward-dial
 port 0/0:15:D
!
dial-peer voice 1016 pots
 incoming called-number 2.....
 direct-inward-dial
```

```
 port 0/0:16:D
!
dial-peer voice 1017 pots
 incoming called-number 2.....
 direct-inward-dial
 port 0/0:17:D
!
dial-peer voice 1018 pots
 incoming called-number 2.....
 direct-inward-dial
 port 0/0:18:D
!
!
gateway
!
!
line con 0
 transport output all
 stopbits 1
line vty 0 4
 password any
 login
 transport input all
 transport output all
line 0/00 0/215
 modem InOut
line 4/00 5/323
 modem InOut
!
ntp clock-period 17180050
ntp server 10.12.6.97
end
```

Site5 Cisco Communications Media Module Gateway1

```
version 12.4
no service pad
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname cs5-cmm-gw1
!
boot-start-marker
boot system bootflash:wscmm-ipvoicek9-mz.124-4.T1.bin
boot-end-marker
!
logging buffered 10000000 debugging
no logging console
enable password any
!
no aaa new-model
!
resource policy
!
clock timezone EST -5
clock summer-time US_EDT recurring
mmi polling-interval 60
no mmi auto-configure
no mmi pvc
mmi snmp-timeout 180
ip subnet-zero
```

```
ip tcp synwait-time 13
!
!
ip ftp username vtgrtp
ip ftp password any
ip domain name rtp.com
ip name-server 10.12.3.67
ip name-server 10.12.6.67
!
isdn switch-type primary-dms100
!
!
controller T1 1/0
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 1/1
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 1/2
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 1/3
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 1/4
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 1/5
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 2/0
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 2/1
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 2/2
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 2/3
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 2/4
 framing esf
```

```
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 2/5
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 3/0
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 3/1
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 3/2
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 3/3
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 3/4
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 3/5
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
!
interface GigabitEthernet1/0
 ip address 10.12.7.114 255.255.255.240
 no ip proxy-arp
 no negotiation auto
 no keepalive
!
interface Serial1/0:23
 no ip address
 encapsulation hdlc
 no logging event link-status
 isdn switch-type primary-ni
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial1/1:23
 no ip address
 encapsulation hdlc
 no logging event link-status
 isdn switch-type primary-ni
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial1/2:23
```

```
 no ip address
 encapsulation hdlc
 no logging event link-status
 isdn switch-type primary-ni
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial1/3:23
 no ip address
 encapsulation hdlc
 no logging event link-status
 isdn switch-type primary-ni
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial1/4:23
 no ip address
 encapsulation hdlc
 no logging event link-status
 isdn switch-type primary-ni
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial1/5:23
 no ip address
 encapsulation hdlc
 no logging event link-status
 isdn switch-type primary-ni
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial2/0:23
 no ip address
 encapsulation hdlc
 no logging event link-status
 isdn switch-type primary-ni
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial2/1:23
 no ip address
 encapsulation hdlc
 no logging event link-status
 isdn switch-type primary-ni
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial2/2:23
 no ip address
 encapsulation hdlc
 no logging event link-status
 isdn switch-type primary-ni
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial2/3:23
 no ip address
```

```
 encapsulation hdlc
 no logging event link-status
 isdn switch-type primary-ni
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial2/4:23
 no ip address
 encapsulation hdlc
 no logging event link-status
 isdn switch-type primary-ni
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial2/5:23
 no ip address
 encapsulation hdlc
 no logging event link-status
 isdn switch-type primary-ni
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial3/0:23
 no ip address
 encapsulation hdlc
 no logging event link-status
 isdn switch-type primary-ni
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial3/1:23
 no ip address
 encapsulation hdlc
 no logging event link-status
 isdn switch-type primary-ni
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial3/2:23
 no ip address
 encapsulation hdlc
 no logging event link-status
 isdn switch-type primary-ni
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial3/3:23
 no ip address
 encapsulation hdlc
 no logging event link-status
 isdn switch-type primary-ni
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial3/4:23
 no ip address
 encapsulation hdlc
```

```
        no logging event link-status
        isdn switch-type primary-ni
        isdn incoming-voice voice
        isdn bind-l3 ccm-manager
        no cdp enable
       !
       interface Serial3/5:23
        no ip address
        encapsulation hdlc
        no logging event link-status
        isdn switch-type primary-ni
        isdn incoming-voice voice
        isdn bind-l3 ccm-manager
        no cdp enable
       !
       ip classless
       ip route 0.0.0.0 0.0.0.0 10.12.7.113
       !
       no ip http server
       no ip http secure-server
       !
       snmp-server community public RO
       snmp-server community gbipcc RW
       snmp-server enable traps snmp authentication linkdown linkup coldstart warmstart
       snmp-server enable traps tty
       snmp-server enable traps xgcp
       snmp-server enable traps dial
       snmp-server enable traps dsp card-status
       snmp-server enable traps entity
       snmp-server enable traps hsrp
       snmp-server enable traps ipmulticast
       snmp-server enable traps cpu threshold
       snmp-server enable traps syslog
       snmp-server enable traps voice poor-qov
       snmp-server enable traps dnis
       !
       control-plane
       !
       !
       voice-port 1/0:23
       !
       voice-port 1/1:23
       !
       voice-port 1/2:23
       !
       voice-port 1/3:23
       !
       voice-port 1/4:23
       !
       voice-port 1/5:23
       !
       voice-port 2/0:23
       !
       voice-port 2/1:23
       !
       voice-port 2/2:23
       !
       voice-port 2/3:23
       !
       voice-port 2/4:23
       !
       voice-port 2/5:23
       !
       voice-port 3/0:23
```

```
!
voice-port 3/1:23
!
voice-port 3/2:23
!
voice-port 3/3:23
!
voice-port 3/4:23
!
voice-port 3/5:23
!
ccm-manager redundant-host CS5-CM2
ccm-manager mgcp
ccm-manager music-on-hold
ccm-manager config server cs5-pub1
ccm-manager config
!
mgcp
mgcp call-agent CS5-CM1 2427 service-type mgcp version 0.1
mgcp dtmf-relay voip codec all mode out-of-band
mgcp rtp unreachable timeout 1000 action notify
mgcp modem passthrough voip mode nse
mgcp package-capability rtp-package
no mgcp package-capability res-package
mgcp package-capability sst-package
mgcp package-capability pre-package
no mgcp timer receive-rtcp
mgcp sdp simple
mgcp fax t38 inhibit
mgcp rtp payload-type g726r16 static
!
mgcp profile default
!
!
banner motd
WARNING !! UNAUTHORIZED ACCESS PROHIBITED.


!
line con 0
 privilege level 15
line vty 0 4
 exec-timeout 0 0
 privilege level 15
 no login
!
exception protocol ftp
exception dump 10.12.13.212
ntp clock-period 17180004
ntp server 10.12.3.138
!
end
```

Parent/Child Call Flow Components

Listed in this section are configuration commands for some of the components that are involved in handling the Parent/Child call flow in Test Bed 1:

- Site1 Cisco 3600 Gatekeeper1
- Site4 Cisco 3745 Gateway1
- Site9 Cisco 3600 Gatekeeper1

Site1 Cisco 3600 Gatekeeper1

```
version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname CS1-3660-GK1
!
boot-start-marker
boot system flash:c3660-jsx-mz.124-5.13.T4
boot-end-marker
!
logging buffered 1000000 debugging
no logging console
enable password any
!
no aaa new-model
!
resource policy
!
clock timezone EST -5
clock summer-time EDT recurring
voice-card 1
!
voice-card 2
!
voice-card 3
!
voice-card 4
!
voice-card 5
!
!
ip cef
ip domain name rtp.com
ip name-server 10.12.3.67
ip name-server 10.12.6.67
!
!
controller T1 1/0
 framing sf
 linecode ami
!
controller T1 1/1
 framing sf
 linecode ami
!
controller T1 2/0
 framing sf
 linecode ami
```

```
!
controller T1 2/1
 framing sf
 linecode ami
!
controller T1 3/0
 framing sf
 linecode ami
!
controller T1 3/1
 framing sf
 linecode ami
!
controller T1 4/0
 framing sf
 linecode ami
!
controller T1 4/1
 framing sf
 linecode ami
!
controller T1 5/0
 framing sf
 linecode ami
!
!
interface FastEthernet0/0
 ip address 10.12.3.99 255.255.255.240
 speed 100
 full-duplex
 standby 1 ip 10.12.3.104
 standby 1 timers 1 2
 standby 1 priority 110
 standby 1 preempt
!
interface FastEthernet0/1
 ip address 10.12.1.131 255.255.255.0
 speed 100
 full-duplex
!
ip http server
ip route 0.0.0.0 0.0.0.0 10.12.3.97
!
!
snmp-server community public RO
snmp-server community private RW
snmp-server enable traps snmp authentication linkdown linkup coldstart warmstart
snmp-server enable traps vrrp
snmp-server enable traps ds1
snmp-server enable traps tty
snmp-server enable traps eigrp
snmp-server enable traps casa
snmp-server enable traps gatekeeper
snmp-server enable traps xgcp
snmp-server enable traps isdn call-information
snmp-server enable traps isdn layer2
snmp-server enable traps isdn chan-not-avail
snmp-server enable traps isdn ietf
snmp-server enable traps icsudsu
snmp-server enable traps ds3
snmp-server enable traps hsrp
snmp-server enable traps config
snmp-server enable traps entity
snmp-server enable traps cpu threshold
```

```
snmp-server enable traps config-copy
snmp-server enable traps flash insertion removal
snmp-server enable traps envmon
snmp-server enable traps ds0-busyout
snmp-server enable traps ds1-loopback
snmp-server enable traps bgp
snmp-server enable traps ospf state-change
snmp-server enable traps ospf errors
snmp-server enable traps ospf retransmit
snmp-server enable traps ospf lsa
snmp-server enable traps ospf cisco-specific state-change nssa-trans-change
snmp-server enable traps ospf cisco-specific state-change shamlink interface-old
snmp-server enable traps ospf cisco-specific state-change shamlink neighbor
snmp-server enable traps ospf cisco-specific errors
snmp-server enable traps ospf cisco-specific retransmit
snmp-server enable traps ospf cisco-specific lsa
snmp-server enable traps pim neighbor-change rp-mapping-change invalid-pim-message
snmp-server enable traps ipmulticast
snmp-server enable traps mvpn
snmp-server enable traps msdp
snmp-server enable traps rsvp
snmp-server enable traps frame-relay
snmp-server enable traps frame-relay subif
snmp-server enable traps syslog
snmp-server enable traps rtr
snmp-server enable traps bulkstat collection transfer
snmp-server enable traps mpls ldp
snmp-server enable traps mpls traffic-eng
snmp-server enable traps mpls vpn
snmp-server enable traps cnpd
snmp-server enable traps stun
snmp-server enable traps dlsw
snmp-server enable traps bstun
snmp-server enable traps pppoe
snmp-server enable traps l2tun session
snmp-server enable traps atm subif
snmp-server enable traps dial
snmp-server enable traps dsp card-status
snmp-server enable traps dsp oper-state
snmp-server enable traps ipmobile
snmp-server enable traps vtp
snmp-server enable traps vsimaster
snmp-server enable traps event-manager
snmp-server enable traps voice
snmp-server enable traps dnis
snmp-server enable traps ccme
snmp-server enable traps srst
snmp-server host 10.12.6.70 public
!
!
control-plane
!
!
gatekeeper
 zone local CS1-CVP-ZONE rtp.com 10.12.3.104
 zone cluster remote DC-CCM-ZONE rtp.com
  element CS1-3660-GK3 10.12.3.103 1719
  element CS4-3660-GK3 10.12.6.103 1719
 !
 zone cluster remote CS9-GK1 bxb.com
  element CS9-3660-GK1 10.12.10.99 1719
 !
 zone prefix CS1-CVP-ZONE 1111111111* gw-priority 10 CS1-3745-GW1
 zone prefix DC-CCM-ZONE 21680.
```

```
          zone prefix DC-CCM-ZONE 21681.
          zone prefix DC-CCM-ZONE 21682.
          zone prefix CS9-GK1 21683.
          zone prefix CS9-GK1 21684.
          zone prefix CS9-GK1 21685.
          zone prefix CS1-CVP-ZONE 2194..
          zone prefix DC-CCM-ZONE 24680.
          zone prefix DC-CCM-ZONE 24681.
          zone prefix DC-CCM-ZONE 24682.
          zone prefix CS9-GK1 24683.
          zone prefix CS9-GK1 24684.
          zone prefix CS9-GK1 24685.
          gw-type-prefix 1#* default-technology
          no shutdown
         !
         !
         line con 0
          transport output all
         line aux 0
          transport output all
         line vty 0 4
          exec-timeout 0 0
          password any
          login
          transport input all
          transport output all
         !
         ntp clock-period 17180292
         ntp server 10.12.3.98
         !end
```

Site4 Cisco 3745 Gateway1

```
         version 12.4
         service timestamps debug datetime msec localtime
         service timestamps log datetime msec localtime
         no service password-encryption
         !
         hostname CS4-3745-GW1
         !
         boot-start-marker
         boot system flash:c3745-ipvoice-mz.124-5.13.T4
         boot-end-marker
         !
         logging buffered 1000000 debugging
         no logging console
         enable password any
         !
         no aaa new-model
         !
         resource policy
         !
         clock timezone EDT -5
         clock summer-time EST recurring
         no network-clock-participate slot 1
         no network-clock-participate slot 2
         no network-clock-participate slot 3
         no network-clock-participate slot 4
         voice-card 1
          no dspfarm
         !
         voice-card 2
```

```
 no dspfarm
!
voice-card 3
 no dspfarm
!
voice-card 4
 no dspfarm
!
ip cef
!
!
ip domain name rtp.com
ip host isn-vxml 10.12.6.162
ip name-server 10.12.3.67
ip name-server 10.12.6.67
isdn switch-type primary-dms100
!
!
voice call carrier capacity active
!
voice service voip
 h323
!
!
voice class codec 1
 codec preference 1 g711ulaw
 codec preference 2 g729r8
!
!
http client cache memory pool 15000
http client cache memory file 600
ivr prompt memory 15000
!
application
 service vru-leg flash:bootstrap.tcl
  paramspace english index 0
  paramspace english language en
  paramspace english location flash
  paramspace english prefix en
 !
 service new-call flash:bootstrap.vxml
  paramspace english index 0
  paramspace english language en
  paramspace english location flash
  paramspace english prefix en
 !
 service survivability flash:survivability.tcl
 !
 service handoff flash:handoff.tcl
  paramspace english index 0
  paramspace english language en
  paramspace english location flash
  paramspace english prefix en
 !
!
controller T1 1/0
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 1/1
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
```

```
!
controller T1 2/0
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 2/1
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 3/0
 framing esf
 linecode b8zs
!
controller T1 3/1
 framing esf
 linecode b8zs
!
controller T1 4/0
 framing esf
 linecode b8zs
!
controller T1 4/1
 framing esf
 linecode b8zs
!
!
interface FastEthernet0/0
 ip address 10.12.6.105 255.255.255.240
 ip route-cache same-interface
 speed 100
 full-duplex
 h323-gateway voip interface
 h323-gateway voip id CS4-CVP-ZONE ipaddr 10.12.6.104 1719 priority 120
 h323-gateway voip h323-id CS4-3745-GW1
 h323-gateway voip tech-prefix 1#
 h323-gateway voip bind srcaddr 10.12.6.105
!
interface FastEthernet0/1
 no ip address
 shutdown
 duplex auto
 speed auto
!
interface Serial1/0:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice voice
 no cdp enable
!
interface Serial1/1:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice voice
 no cdp enable
!
interface Serial2/0:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice voice
```

```
 no cdp enable
!
interface Serial2/1:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice voice
 no cdp enable
!
ip route 0.0.0.0 0.0.0.0 10.12.6.97
!
ip http server
ip http authentication local
ip http timeout-policy idle 600 life 86400 requests 10000
!
snmp-server community gbipcc RW
snmp-server community public RO
snmp-server community private RW
snmp-server system-shutdown
snmp-server enable traps snmp authentication linkdown linkup coldstart warmstart
snmp-server enable traps vrrp
snmp-server enable traps tty
snmp-server enable traps xgcp
snmp-server enable traps flash insertion removal
snmp-server enable traps envmon
snmp-server enable traps icsudsu
snmp-server enable traps isdn call-information
snmp-server enable traps isdn layer2
snmp-server enable traps isdn chan-not-avail
snmp-server enable traps isdn ietf
snmp-server enable traps ds0-busyout
snmp-server enable traps ds1-loopback
snmp-server enable traps atm subif
snmp-server enable traps cnpd
snmp-server enable traps config-copy
snmp-server enable traps config
snmp-server enable traps dial
snmp-server enable traps dsp card-status
snmp-server enable traps entity
snmp-server enable traps frame-relay
snmp-server enable traps frame-relay subif
snmp-server enable traps hsrp
snmp-server enable traps ipmulticast
snmp-server enable traps ospf state-change
snmp-server enable traps ospf errors
snmp-server enable traps ospf retransmit
snmp-server enable traps ospf lsa
snmp-server enable traps ospf cisco-specific state-change nssa-trans-change
snmp-server enable traps ospf cisco-specific state-change shamlink interface
snmp-server enable traps ospf cisco-specific state-change shamlink neighbor
snmp-server enable traps ospf cisco-specific errors
snmp-server enable traps ospf cisco-specific retransmit
snmp-server enable traps ospf cisco-specific lsa
snmp-server enable traps pim neighbor-change rp-mapping-change invalid-pim-message
snmp-server enable traps pppoe
snmp-server enable traps cpu threshold
snmp-server enable traps rsvp
snmp-server enable traps rtr
snmp-server enable traps syslog
snmp-server enable traps l2tun session
snmp-server enable traps vtp
snmp-server enable traps voice poor-qov
snmp-server enable traps dnis
snmp-server host 10.12.6.70 public
```

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```
!
!
control-plane
!
!
voice-port 1/0:23
!
voice-port 1/1:23
!
voice-port 2/0:23
!
voice-port 2/1:23
!
!
dial-peer cor custom
!
!
dial-peer voice 1 voip
 tech-prefix 1#
!
dial-peer voice 1000 voip
 service vru-leg
 session target ras
 incoming called-number 4444444444T
 dtmf-relay rtp-nte h245-signal h245-alphanumeric
 codec g711ulaw
 no vad
!
dial-peer voice 1001 voip
 destination-pattern 2494..
 voice-class codec 1
 session target ras
 incoming called-number 2494..
 tech-prefix 2#
 dtmf-relay rtp-nte h245-signal h245-alphanumeric
 no vad
!
dial-peer voice 2000 pots
 incoming called-number 2494..
 no digit-strip
 direct-inward-dial
 port 1/0:23
!
gateway
 timer receive-rtp 1200
!
!
line con 0
 exec-timeout 0 0
 privilege level 15
line aux 0
line vty 0 4
 exec-timeout 0 0
 password any
 login
line vty 5 99
 no login
!
ntp clock-period 17179308
ntp server 10.12.6.98
!
end
```

Site9 Cisco 3600 Gatekeeper1

```
version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname CS9-3660-GK1
!
boot-start-marker
boot system flash:c3660-jsx-mz.124-5.13.T4
boot-end-marker
!
logging buffered 1000000 debugging
no logging console
enable password any


!
no aaa new-model
!
resource policy
!
memory-size iomem 10
clock timezone EST -5
clock summer-time EDT recurring
!
!
ip cef
ip domain name bxb.com
ip name-server 10.12.10.67
!
!
interface FastEthernet0/0
 ip address 10.12.10.99 255.255.255.240
 speed 100
 full-duplex
!
interface FastEthernet5/0
 ip address 10.12.1.153 255.255.255.0
 speed 100
 full-duplex
!
interface Serial5/0
 no ip address
 shutdown
 clock rate 2000000
!
interface FastEthernet5/1
 no ip address
 shutdown
 duplex auto
 speed auto
!
interface Serial5/1
 no ip address
 shutdown
 clock rate 2000000
!
ip http server
ip route 0.0.0.0 0.0.0.0 10.12.10.97
!
!
snmp-server community public RO
```

```
        snmp-server community private RW
        snmp-server enable traps snmp authentication linkdown linkup coldstart warmstart
        snmp-server enable traps vrrp
        snmp-server enable traps tty
        snmp-server enable traps casa
        snmp-server enable traps gatekeeper
        snmp-server enable traps xgcp
        snmp-server enable traps isdn call-information
        snmp-server enable traps isdn layer2
        snmp-server enable traps isdn chan-not-avail
        snmp-server enable traps isdn ietf
        snmp-server enable traps icsudsu
        snmp-server enable traps hsrp
        snmp-server enable traps config
        snmp-server enable traps entity
        snmp-server enable traps cpu threshold
        snmp-server enable traps config-copy
        snmp-server enable traps flash insertion removal
        snmp-server enable traps envmon
        snmp-server enable traps ds0-busyout
        snmp-server enable traps ds1-loopback
        snmp-server enable traps bgp
        snmp-server enable traps ospf state-change
        snmp-server enable traps ospf errors
        snmp-server enable traps ospf retransmit
        snmp-server enable traps ospf lsa
        snmp-server enable traps ospf cisco-specific state-change nssa-trans-change
        snmp-server enable traps ospf cisco-specific state-change shamlink interface
        snmp-server enable traps ospf cisco-specific state-change shamlink neighbor
        snmp-server enable traps ospf cisco-specific errors
        snmp-server enable traps ospf cisco-specific retransmit
        snmp-server enable traps ospf cisco-specific lsa
        snmp-server enable traps pim neighbor-change rp-mapping-change invalid-pim-message
        snmp-server enable traps ipmulticast
        snmp-server enable traps msdp
        snmp-server enable traps rsvp
        snmp-server enable traps frame-relay
        snmp-server enable traps frame-relay subif
        snmp-server enable traps syslog
        snmp-server enable traps rtr
        snmp-server enable traps bulkstat collection transfer
        snmp-server enable traps mpls ldp
        snmp-server enable traps mpls traffic-eng
        snmp-server enable traps mpls vpn
        snmp-server enable traps cnpd
        snmp-server enable traps stun
        snmp-server enable traps dlsw
        snmp-server enable traps bstun
        snmp-server enable traps pppoe
        snmp-server enable traps l2tun session
        snmp-server enable traps atm subif
        snmp-server enable traps dial
        snmp-server enable traps dsp card-status
        snmp-server enable traps ipmobile
        snmp-server enable traps vtp
        snmp-server enable traps vsimaster
        snmp-server enable traps voice poor-qov
        snmp-server enable traps dnis
        snmp-server host 10.12.6.70 public
        !
        !
        control-plane
        !
        !
```

```
gatekeeper
 zone local CS9-GK1 bxb.com 10.12.10.99
 zone cluster remote DC-CCM-ZONE rtp.com
  element CS1-3660-GK3 10.12.3.103 1719
  element CS4-3660-GK3 10.12.6.103 1719
 !
 zone prefix DC-CCM-ZONE 21....
 zone prefix DC-CCM-ZONE 22....
 zone prefix DC-CCM-ZONE 23....
 zone prefix DC-CCM-ZONE 24....
 zone prefix CS9-GK1 39....
 gw-type-prefix 1#* default-technology
 no shutdown
!
!
line con 0
 transport output all
line aux 0
 transport output all
line vty 0 4
 password any
 login
!
ntp clock-period 17180253
ntp server 10.12.10.98
!
end
```

Cisco Unified Outbound Dialer Call Flow Components

Listed in this section are configuration commands for the Cisco 3745 gateway that is involved in handling the Cisco Unified Outbound Dialer Call Flow in Test Bed 1:

- Site6 Cisco 3745 Gateway1

Site6 Cisco 3745 Gateway1

```
version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname CS6-3745-GW1
!
boot-start-marker
boot system flash:c3745-ipvoice-mz.124-5.13.T4
boot-end-marker
!
enable password any
!
no aaa new-model
!
resource policy
!
clock timezone EST -5
clock summer-time EDT recurring
no network-clock-participate slot 1
no network-clock-participate slot 2
no network-clock-participate slot 3
no network-clock-participate slot 4
```

```
voice-card 1
 dspfarm
!
voice-card 2
 dspfarm
!
voice-card 3
 dspfarm
!
voice-card 4
 dspfarm
!
ip cef
!
!
ip domain name rtp.com
ip name-server 10.12.6.67
ip name-server 10.12.3.67
isdn switch-type primary-dms100
!
!
controller T1 1/0
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 1/1
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 2/0
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 2/1
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 3/0
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 3/1
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 4/0
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
controller T1 4/1
 framing esf
 linecode b8zs
 pri-group timeslots 1-24 service mgcp
!
!
!
!
```

```
interface FastEthernet0/0
 ip address 10.12.8.114 255.255.255.248
 speed 100
 full-duplex
!
interface FastEthernet0/1
 ip address 10.12.1.148 255.255.255.0
 speed 100
 full-duplex
!
interface Serial1/0:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial1/1:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial2/0:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial2/1:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial3/0:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial3/1:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial4/0:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
```

```
 no cdp enable
!
interface Serial4/1:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
ip route 0.0.0.0 0.0.0.0 10.12.8.113
!
ip http server
!
snmp-server community public RO
snmp-server community private RW
snmp-server enable traps snmp authentication linkdown linkup coldstart warmstart
snmp-server enable traps vrrp
snmp-server enable traps ds1
snmp-server enable traps tty
snmp-server enable traps eigrp
snmp-server enable traps xgcp
snmp-server enable traps flash insertion removal
snmp-server enable traps ds3
snmp-server enable traps envmon
snmp-server enable traps icsudsu
snmp-server enable traps isdn call-information
snmp-server enable traps isdn layer2
snmp-server enable traps isdn chan-not-avail
snmp-server enable traps isdn ietf
snmp-server enable traps ds0-busyout
snmp-server enable traps ds1-loopback
snmp-server enable traps atm subif
snmp-server enable traps cnpd
snmp-server enable traps config-copy
snmp-server enable traps config
snmp-server enable traps dial
snmp-server enable traps dsp card-status
snmp-server enable traps entity
snmp-server enable traps event-manager
snmp-server enable traps frame-relay
snmp-server enable traps frame-relay subif
snmp-server enable traps hsrp
snmp-server enable traps ipmulticast
snmp-server enable traps msdp
snmp-server enable traps mvpn
snmp-server enable traps ospf state-change
snmp-server enable traps ospf errors
snmp-server enable traps ospf retransmit
snmp-server enable traps ospf lsa
snmp-server enable traps ospf cisco-specific state-change nssa-trans-change
snmp-server enable traps ospf cisco-specific state-change shamlink interface-old
snmp-server enable traps ospf cisco-specific state-change shamlink neighbor
snmp-server enable traps ospf cisco-specific errors
snmp-server enable traps ospf cisco-specific retransmit
snmp-server enable traps ospf cisco-specific lsa
snmp-server enable traps pim neighbor-change rp-mapping-change invalid-pim-message
snmp-server enable traps pppoe
snmp-server enable traps cpu threshold
snmp-server enable traps rsvp
snmp-server enable traps rtr
snmp-server enable traps syslog
snmp-server enable traps l2tun session
snmp-server enable traps vtp
```

```
snmp-server enable traps voice fallback poor-qov
snmp-server enable traps dnis
snmp-server host 10.12.6.70 public
!
!
control-plane
!
!
voice-port 1/0:23
!
voice-port 1/1:23
!
voice-port 2/0:23
!
voice-port 2/1:23
!
voice-port 3/0:23
!
voice-port 3/1:23
!
voice-port 4/0:23
!
voice-port 4/1:23
!
ccm-manager redundant-host CS5-CM1
ccm-manager mgcp
ccm-manager music-on-hold
ccm-manager config server 10.12.7.2
ccm-manager config
!
mgcp
mgcp call-agent CS5-CM2 2427 service-type mgcp version 0.1
mgcp dtmf-relay voip codec all mode out-of-band
mgcp rtp unreachable timeout 1000 action notify
mgcp modem passthrough voip mode nse
mgcp package-capability rtp-package
no mgcp package-capability res-package
mgcp package-capability sst-package
no mgcp package-capability fxr-package
mgcp package-capability pre-package
no mgcp timer receive-rtcp
mgcp sdp simple
mgcp fax t38 inhibit
mgcp rtp payload-type g726r16 static
!
mgcp profile default
!
!
line con 0
line aux 0
line vty 0 4
 password any
 login
!
!
end
```

Test Bed 2 Call Flows

Cisco Unified Customer Voice Portal Post-Routed Call Flow Components

Listed in this section are configuration commands for some of the components that are involved in handling the Cisco Unified Customer Voice Portal (Unified CVP) Post-Routed Call Flow in Test Bed 2:

- Site1 Cisco 3600 Gatekeeper 1
- Site3 Cisco AS5400HPX Gateway1 (PSTN)
- Site5 Cisco Content Services Switch2
- Site6 Cisco AS5400HPX Gateway2 (PSTN and VXML)
- Site6 Cisco7206VXR Router
- Site7 Cisco 6506 MSFC Switch
- Site8 Cisco 3845 Gateway1

Site1 Cisco 3600 Gatekeeper 1

```
version 12.4
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname PS1-3660-GK1
!
boot-start-marker
boot system flash:c3660-jsx-mz.124-4.7.PI3b
boot-end-marker
!
logging buffered 100000000 debugging
no logging console
enable password any
!
no aaa new-model
!
resource policy
!
clock timezone EST -5
clock summer-time EDT recurring
voice-card 3
!
voice-card 4
!
!
ip cef
ip domain name sjc.com
ip name-server 10.12.11.67
ip name-server 10.12.15.67
!
!
controller T1 1/0
 framing sf
 linecode ami
!
controller T1 1/1
 framing sf
```

```
 linecode ami
!
controller T1 1/2
 framing sf
 linecode ami
!
controller T1 1/3
 framing sf
 linecode ami
!
controller T1 2/0
 framing sf
 linecode ami
!
controller T1 2/1
 framing sf
 linecode ami
!
controller T1 2/2
 framing sf
 linecode ami
!
controller T1 2/3
 framing sf
 linecode ami
!
controller T1 3/0
 framing sf
 linecode ami
!
controller T1 4/0
 framing sf
 linecode ami
!
controller T1 4/1
 framing sf
 linecode ami
!
!
interface FastEthernet0/0
 ip address 10.12.11.100 255.255.255.240
 speed 100
 full-duplex
 standby 1 ip 10.12.11.99
 standby 1 timers 1 2
 standby 1 priority 110
 standby 1 preempt
!
interface FastEthernet0/1
 ip address 10.12.1.3 255.255.255.0
 speed 100
 full-duplex
!
ip http server
ip route 0.0.0.0 0.0.0.0 10.12.11.97
!
!
snmp-server community private RW
snmp-server community public RO
snmp-server enable traps snmp authentication linkdown linkup coldstart warmstart
snmp-server enable traps vrrp
snmp-server enable traps tty
snmp-server enable traps casa
snmp-server enable traps gatekeeper
```

```
snmp-server enable traps xgcp
snmp-server enable traps isdn call-information
snmp-server enable traps isdn layer2
snmp-server enable traps isdn chan-not-avail
snmp-server enable traps isdn ietf
snmp-server enable traps icsudsu
snmp-server enable traps hsrp
snmp-server enable traps config
snmp-server enable traps entity
snmp-server enable traps cpu threshold
snmp-server enable traps config-copy
snmp-server enable traps flash insertion removal
snmp-server enable traps envmon
snmp-server enable traps ds0-busyout
snmp-server enable traps ds1-loopback
snmp-server enable traps bgp
snmp-server enable traps ospf state-change
snmp-server enable traps ospf errors
snmp-server enable traps ospf retransmit
snmp-server enable traps ospf lsa
snmp-server enable traps ospf cisco-specific state-change nssa-trans-change
snmp-server enable traps ospf cisco-specific state-change shamlink interface
snmp-server enable traps ospf cisco-specific state-change shamlink neighbor
snmp-server enable traps ospf cisco-specific errors
snmp-server enable traps ospf cisco-specific retransmit
snmp-server enable traps ospf cisco-specific lsa
snmp-server enable traps pim neighbor-change rp-mapping-change invalid-pim-message
snmp-server enable traps ipmulticast
snmp-server enable traps msdp
snmp-server enable traps rsvp
snmp-server enable traps frame-relay
snmp-server enable traps frame-relay subif
snmp-server enable traps syslog
snmp-server enable traps rtr
snmp-server enable traps bulkstat collection transfer
snmp-server enable traps mpls ldp
snmp-server enable traps mpls traffic-eng
snmp-server enable traps mpls vpn
snmp-server enable traps cnpd
snmp-server enable traps stun
snmp-server enable traps dlsw
snmp-server enable traps bstun
snmp-server enable traps pppoe
snmp-server enable traps l2tun session
snmp-server enable traps atm subif
snmp-server enable traps dial
snmp-server enable traps dsp card-status
snmp-server enable traps ipmobile
snmp-server enable traps vtp
snmp-server enable traps vsimaster
snmp-server enable traps voice poor-qov
snmp-server enable traps dnis
snmp-server host 10.12.15.56 public
!
!
control-plane
!
!
dial-peer cor custom
!
!
gatekeeper
 zone local PS1-CVP-ZONE sjc.com 10.12.11.99
 zone local DC-CCM-ZONE sjc.com
```

```
    zone local PS3-CCM-ZONE sjc.com
    zone local PS7-CCM-ZONE sjc.com
    zone prefix PS1-CVP-ZONE 116... gw-priority 10 ps1-cvp5
    zone prefix DC-CCM-ZONE 11....
    zone prefix PS3-CCM-ZONE 13....
    zone prefix DC-CCM-ZONE 15....
    zone prefix DC-CCM-ZONE 16....
    zone prefix PS7-CCM-ZONE 171...
    zone prefix PS7-CCM-ZONE 173...
    zone prefix DC-CCM-ZONE 17....
    zone prefix DC-CCM-ZONE 18....
    zone prefix PS3-CCM-ZONE 313....
    zone prefix PS1-CVP-ZONE 3333333333* gw-priority 10 PS3-3825-GW2 PS3-3825-GW1
    zone prefix PS1-CVP-ZONE 3613138... gw-priority 10 ps1-cvp1
    zone prefix PS1-CVP-ZONE 3613138... gw-priority 5 ps1-cvp2
    zone prefix PS1-CVP-ZONE 3613139... gw-priority 10 ps1-cvp1
    zone prefix PS1-CVP-ZONE 3613139... gw-priority 5 ps1-cvp2
    zone prefix PS1-CVP-ZONE 5317178... gw-priority 10 ps1-cvp1
    zone prefix PS1-CVP-ZONE 5317178... gw-priority 5 ps1-cvp2
    zone prefix PS1-CVP-ZONE 5317179... gw-priority 10 ps1-cvp1
    zone prefix PS1-CVP-ZONE 5317179... gw-priority 5 ps1-cvp2
    zone prefix PS1-CVP-ZONE 6016168... gw-priority 10 ps1-cvp2
    zone prefix PS1-CVP-ZONE 6016168... gw-priority 5 ps1-cvp1
    zone prefix PS1-CVP-ZONE 6016169... gw-priority 10 ps1-cvp2
    zone prefix PS1-CVP-ZONE 6016169... gw-priority 5 ps1-cvp1
    zone prefix DC-CCM-ZONE 616....
    zone prefix PS1-CVP-ZONE 6618188... gw-priority 10 ps1-cvp2
    zone prefix PS1-CVP-ZONE 6618188... gw-priority 5 ps1-cvp1
    zone prefix PS1-CVP-ZONE 6618189... gw-priority 10 ps1-cvp2
    zone prefix PS1-CVP-ZONE 6618189... gw-priority 5 ps1-cvp1
    zone prefix PS1-CVP-ZONE 6666666666* gw-priority 10 PS6-5400-GW1 PS6-5400-GW2
PS6-5400-GW3 PS6-5400-GW4
    zone prefix PS7-CCM-ZONE 7171...
    zone prefix DC-CCM-ZONE 717....
    zone prefix PS1-CVP-ZONE 7777777777* gw-priority 10 PS7-3745-GW1
    zone prefix DC-CCM-ZONE 818....
    zone prefix PS1-CVP-ZONE 8888888888* gw-priority 10 PS8-3845-GW1
    zone prefix PS1-CVP-ZONE 919472.... gw-priority 10 PS6-5400-GW4
    zone prefix PS1-CVP-ZONE 91950..... gw-priority 10 PS6-5400-GW5
    gw-type-prefix 1#* default-technology
    no shutdown
!
!
line con 0
line aux 0
line vty 0 4
    exec-timeout 0 0
    password any
    login
!
ntp clock-period 17180393
ntp server 10.12.11.98
!
end
```

Site3 Cisco AS5400HPX Gateway1 (PSTN)

```
! No configuration change since last restart
!
version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
```

```
no service password-encryption
!
hostname PS3-5400-GW1
!
boot-start-marker
boot system flash:c5400-is-mz.124-5.13.T2
no boot startup-test
boot-end-marker
!
enable password any
!
!
!
resource-pool disable
no aaa new-model
!
resource policy
!
clock timezone EST -5
clock summer-time EDT recurring
spe default-firmware spe-firmware-1
!
!
ip cef
ip domain name sjc.com
ip name-server 10.12.11.67
ip name-server 10.12.15.67
!
!
isdn switch-type primary-dms100
!
!
!
voice class codec 1
 codec preference 1 g711ulaw
 codec preference 2 g729r8
!
!
!
!
!
!
!
!
!
!
!
!
controller T1 6/0
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 6/1
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 6/2
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
```

```
controller T1 6/3
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 6/4
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 6/5
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 6/6
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 6/7
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/0
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/1
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/2
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/3
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/4
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/5
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/6
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/7
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
```

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```
!
!
!
interface FastEthernet0/0
 ip address 10.12.13.101 255.255.255.240
 duplex full
 speed 100
 h323-gateway voip interface
 h323-gateway voip id PS1-CVP-ZONE ipaddr 10.12.11.99 1719 priority 120
 h323-gateway voip h323-id PS3-5400-GW1
 h323-gateway voip tech-prefix 1#
!
interface FastEthernet0/1
 ip address 10.12.1.12 255.255.255.0
 duplex full
 speed 100
!
interface Serial0/0
 no ip address
 shutdown
 clock rate 2000000
!
interface Serial6/0
 no ip address
 shutdown
!
interface Serial7/0
 no ip address
 shutdown
!
interface Serial0/1
 no ip address
 shutdown
 clock rate 2000000
!
interface Serial6/0:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/1:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/2:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/3:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/4:23
```

```
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/5:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/6:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/7:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 isdn T310 60000
 no cdp enable
!
interface Serial7/0:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/1:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/2:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/3:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/4:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/5:23
```

```
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/6:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/7:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Group-Async0
 no ip address
 encapsulation slip
 group-range 1/00 5/107
!
!
ip route 0.0.0.0 0.0.0.0 10.12.13.97
no ip http server
!
!
snmp-server community private RW
snmp-server community public RO
snmp-server enable traps snmp authentication linkdown linkup coldstart warmstart
snmp-server enable traps vrrp
snmp-server enable traps calltracker
snmp-server enable traps tty
snmp-server enable traps xgcp
snmp-server enable traps modem-health
snmp-server enable traps ds0-busyout
snmp-server enable traps ds1-loopback
snmp-server enable traps cnpd
snmp-server enable traps isdn call-information
snmp-server enable traps isdn layer2
snmp-server enable traps isdn chan-not-avail
snmp-server enable traps isdn ietf
snmp-server enable traps fru-ctrl
snmp-server enable traps flash insertion removal
snmp-server enable traps hsrp
snmp-server enable traps config
snmp-server enable traps entity
snmp-server enable traps cpu threshold
snmp-server enable traps config-copy
snmp-server enable traps envmon
snmp-server enable traps aaa_server
snmp-server enable traps bgp
snmp-server enable traps ospf state-change
snmp-server enable traps ospf errors
snmp-server enable traps ospf retransmit
snmp-server enable traps ospf lsa
snmp-server enable traps ospf cisco-specific state-change nssa-trans-change
snmp-server enable traps ospf cisco-specific state-change shamlink interface
snmp-server enable traps ospf cisco-specific state-change shamlink neighbor
snmp-server enable traps ospf cisco-specific errors
snmp-server enable traps ospf cisco-specific retransmit
```

```
snmp-server enable traps ospf cisco-specific lsa
snmp-server enable traps pim neighbor-change rp-mapping-change invalid-pim-message
snmp-server enable traps ipmulticast
snmp-server enable traps msdp
snmp-server enable traps rsvp
snmp-server enable traps frame-relay
snmp-server enable traps frame-relay subif
snmp-server enable traps rtr
snmp-server enable traps syslog
snmp-server enable traps stun
snmp-server enable traps dlsw
snmp-server enable traps bstun
snmp-server enable traps pppoe
snmp-server enable traps l2tun session
snmp-server enable traps dial
snmp-server enable traps dsp card-status
snmp-server enable traps voice poor-qov
snmp-server enable traps dnis
snmp-server host 10.12.15.56 public
!
!
!
control-plane
!
!
!
voice-port 6/0:D
!
voice-port 6/1:D
!
voice-port 6/2:D
!
voice-port 6/3:D
!
voice-port 6/4:D
!
voice-port 6/5:D
!
voice-port 6/6:D
!
voice-port 6/7:D
!
voice-port 7/0:D
!
voice-port 7/1:D
!
voice-port 7/2:D
!
voice-port 7/3:D
!
voice-port 7/4:D
!
voice-port 7/5:D
!
voice-port 7/6:D
!
voice-port 7/7:D
!
!
!
dial-peer voice 1 voip
 tech-prefix 1#
!
dial-peer voice 1000 voip
```

```
         destination-pattern 361313[8-9]...
         voice-class codec 1
         session target ras
         incoming called-number 361313[8-9]...
         tech-prefix 2#
         dtmf-relay rtp-nte h245-signal h245-alphanumeric
         no vad
        !
        dial-peer voice 2000 pots
         incoming called-number 361313[8-9]...
         no digit-strip
         direct-inward-dial
         port 6/0:D
        !
        dial-peer voice 2001 pots
         incoming called-number 361313[8-9]...
         no digit-strip
         direct-inward-dial
         port 6/1:D
        !
        dial-peer voice 2002 pots
         incoming called-number 361313[8-9]...
         no digit-strip
         direct-inward-dial
         port 6/2:D
        !
        dial-peer voice 2003 pots
         incoming called-number 361313[8-9]...
         no digit-strip
         direct-inward-dial
         port 6/3:D
        !
        dial-peer voice 2004 pots
         incoming called-number 361313[8-9]...
         no digit-strip
         direct-inward-dial
         port 6/4:D
        !
        dial-peer voice 2005 pots
         incoming called-number 361313[8-9]...
         no digit-strip
         direct-inward-dial
         port 6/5:D
        !
        dial-peer voice 2006 pots
         incoming called-number 361313[8-9]...
         no digit-strip
         direct-inward-dial
         port 6/6:D
        !
        dial-peer voice 2007 pots
         incoming called-number 361313[8-9]...
         no digit-strip
         direct-inward-dial
         port 6/7:D
        !
        dial-peer voice 2008 pots
         incoming called-number 361313[8-9]...
         no digit-strip
         direct-inward-dial
         port 7/0:D
        !
        dial-peer voice 2009 pots
         incoming called-number 361313[8-9]...
```

```
 no digit-strip
 direct-inward-dial
 port 7/1:D
!
dial-peer voice 2010 pots
 incoming called-number 361313[8-9]...
 no digit-strip
 direct-inward-dial
 port 7/2:D
!
dial-peer voice 2011 pots
 incoming called-number 361313[8-9]...
 no digit-strip
 direct-inward-dial
 port 7/3:D
!
dial-peer voice 2012 pots
 incoming called-number 361313[8-9]...
 no digit-strip
 direct-inward-dial
 port 7/4:D
!
dial-peer voice 2013 pots
 incoming called-number 361313[8-9]...
 no digit-strip
 direct-inward-dial
 port 7/5:D
!
dial-peer voice 2014 pots
 incoming called-number 361313[8-9]...
 no digit-strip
 direct-inward-dial
 port 7/6:D
!
dial-peer voice 2015 pots
 incoming called-number 361313[8-9]...
 no digit-strip
 direct-inward-dial
 port 7/7:D
!
!
gateway
 timer receive-rtp 1200
!
ss7 mtp2-variant Bellcore 0
ss7 mtp2-variant Bellcore 1
ss7 mtp2-variant Bellcore 2
ss7 mtp2-variant Bellcore 3
!
line con 0
 exec-timeout 0 0
line aux 0
line vty 0 4
 exec-timeout 0 0
 password any
 login
line 1/00 2/59
 modem InOut
line 3/00 3/107
 modem InOut
line 5/00 5/107
 modem InOut
!
scheduler allocate 10000 400
```

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```
ntp clock-period 17179977
ntp server 10.12.13.98
end
```

Site5 Cisco Content Services Switch2

```
!Active version: sg0740202

configure

!************************* GLOBAL *************************

  username lab des-password any

  sntp primary-server 10.12.1.1 version 1

  sntp primary-server-poll-interval 120

  cdp run

snmp community gbipcc read-write

dns primary 10.12.11.67

  dns secondary 10.12.15.67

  dns suffix sjc.com

ftp-record DEFAULT_FTP 10.12.1.254 administrator des-password any

ip route 0.0.0.0 0.0.0.0 10.12.15.97 1

!************************* INTERFACE ************************

interface e1

  phy 100Mbits-FD

interface e2

  phy 100Mbits-FD

  bridge vlan 2

!************************* CIRCUIT *************************

circuit VLAN1

ip address 10.12.15.102 255.255.255.240

circuit VLAN2

ip address 10.12.1.17 255.255.255.0

!************************* SERVICE *************************

service PS1-CVP1

  ip address 10.12.11.50

  keepalive retryperiod 2
```

```
        keepalive maxfailure 1

        keepalive type script ap-kal-httpvxml "10.12.11.50"

        active

    service PS1-CVP2

        ip address 10.12.11.51

        keepalive retryperiod 2

        keepalive maxfailure 1

        keepalive type script ap-kal-httpvxml "10.12.11.51"

        active

    service PS1-MS1

        type redirect

        port 80

        keepalive type http

        keepalive retryperiod 2

        keepalive maxfailure 1

        keepalive uri "/postinfo.html"

        ip address 10.12.11.55

        domain 10.12.11.55

        active

    service PS5-CVP3

        keepalive retryperiod 2

        keepalive maxfailure 1

        ip address 10.12.15.50

        keepalive type script ap-kal-httpvxml "10.12.15.50"

        active

    service PS5-CVP4

        keepalive retryperiod 2

        keepalive maxfailure 1

        ip address 10.12.15.51

        keepalive type script ap-kal-httpvxml "10.12.15.51"

        active

    service PS5-MS2
```

```
      port 80

      keepalive type http

      keepalive retryperiod 2

      keepalive maxfailure 1

      keepalive uri "/postinfo.html"

      ip address 10.12.15.55

      domain 10.12.15.55

      active

  service PS6-ASRTTS1

      protocol tcp

      keepalive retryperiod 2

      keepalive maxfailure 1

      keepalive type tcp

      keepalive port 554

      ip address 10.12.16.68

      port 554

      active

  service PS6-ASRTTS2

      protocol tcp

      keepalive retryperiod 2

      keepalive maxfailure 1

      keepalive type tcp

      keepalive port 554

      ip address 10.12.16.69

      port 554

      active

  !************************* OWNER *************************

  owner GB

      content APPSERVERS

          protocol tcp

          port 8000

          add service PS5-CVP3
```

```
            add service PS5-CVP4

            vip address 10.12.15.107

            active

    content ASRTTS

        protocol tcp

        port 554

        add service PS6-ASRTTS1

        add service PS6-ASRTTS2

        primarySorryServer PS6-ASRTTS2

        vip address 10.12.15.108

        active

      content MEDIA

        primarySorryServer PS5-MS2

        protocol tcp

        port 80

        url "/@"

        add service PS1-MS1

        add service PS5-MS2

        vip address 10.12.15.109

        active

    !************************** GROUP **************************

    group appservers

      add destination service PS5-CVP3

      add destination service PS5-CVP4

      vip address 10.12.15.107

      active

    group asrttsservers

      add destination service PS6-ASRTTS2

      vip address 10.12.15.108

      active

    group mediaservers

      add destination service PS5-MS2
```

```
        vip address 10.12.15.109

        active
```

Site6 Cisco AS5400HPX Gateway2 (PSTN and VXML)

```
version 12.4
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname PS6-5400-GW2
!
boot-start-marker
boot system flash:c5400-is-mz.124-5.13.T2
no boot startup-test
boot-end-marker
!
enable secret 5 $1$YEs4$TVzBq7J3hGqy6eftfbtMF.
enable password any
!
!
!
resource-pool disable
no aaa new-model
!
resource policy
!
clock timezone EST -5
clock summer-time EDT recurring
spe default-firmware spe-firmware-1
!
!
ip cef
ip domain name sjc.com
ip host asr-en-us 10.12.16.68
ip host tts-en-us 10.12.16.68
ip host isn-vxml-backup 10.12.11.50
ip host isn-vxml 10.12.11.51
ip host tts-en-us-backup 10.12.16.68
ip host asrtts-en-us 10.12.16.68
ip name-server 10.12.15.67
ip name-server 10.12.11.67
!
!
isdn switch-type primary-dms100
!
!
voice service voip
 fax protocol t38 ls-redundancy 0 hs-redundancy 0 fallback none
 h323
 modem passthrough none codec g729r8 pre-ietf
!
!
voice class codec 1
 codec preference 1 g711ulaw
!
!
ivr asr-server rtsp://10.12.16.68/media/speechrecognizer
ivr tts-server rtsp://10.12.16.68/media/speechsynthesizer
!
application
```

```
service vru-leg flash:bootstrap.tcl
 paramspace english index 0
 paramspace english language en
 paramspace english location flash
 paramspace english prefix en
 !
 service new-call flash:bootstrap.vxml
 paramspace english index 0
 paramspace english language en
 paramspace english location flash
 paramspace english prefix en
 !
 service handoff flash:handoff.tcl
 paramspace english index 0
 paramspace english language en
 paramspace english location flash
 paramspace english prefix en
 !
!
!
fax interface-type fax-mail
!
!
controller T1 6/0
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 6/1
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 6/2
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 6/3
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 6/4
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 6/5
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 6/6
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 6/7
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/0
```

Appendix B   Call Flow Components Configuration Commands

```
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/1
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/2
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/3
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/4
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/5
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/6
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/7
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
!
interface FastEthernet0/0
 ip address 10.12.16.102 255.255.255.240
 duplex full
 speed 100
 h323-gateway voip interface
 h323-gateway voip id PS1-CVP-ZONE ipaddr 10.12.11.99 1719 priority 120
 h323-gateway voip h323-id PS6-5400-GW2
 h323-gateway voip tech-prefix 1#
 h323-gateway voip bind srcaddr 10.12.16.102
!
interface FastEthernet0/1
 description connect to PS0-MGMT1 port 22 patch U9/37
 ip address 10.12.1.23 255.255.255.0
 duplex full
 speed 100
!
interface Serial0/0
 no ip address
 shutdown
 clock rate 2000000
!
interface Serial6/0
 no ip address
 shutdown
```

```
!
interface Serial7/0
 no ip address
 shutdown
!
interface Serial0/1
 no ip address
 shutdown
 clock rate 2000000
!
interface Serial6/0:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/1:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/2:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/3:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/4:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/5:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/6:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/7:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
```

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```
 no cdp enable
!
interface Serial7/0:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/1:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/2:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/3:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/4:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/5:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/6:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/7:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn incoming-voice modem
 isdn T310 60000
 no cdp enable
!
interface Group-Async0
 no ip address
 encapsulation slip
 group-range 1/00 5/107
!
```

```
!
ip route 0.0.0.0 0.0.0.0 10.12.16.97
no ip http server
!
!
snmp-server community private RW
snmp-server community public RO
snmp-server enable traps snmp authentication linkdown linkup coldstart warmstart
snmp-server enable traps vrrp
snmp-server enable traps calltracker
snmp-server enable traps tty
snmp-server enable traps xgcp
snmp-server enable traps modem-health
snmp-server enable traps ds0-busyout
snmp-server enable traps ds1-loopback
snmp-server enable traps cnpd
snmp-server enable traps isdn call-information
snmp-server enable traps isdn layer2
snmp-server enable traps isdn chan-not-avail
snmp-server enable traps isdn ietf
snmp-server enable traps fru-ctrl
snmp-server enable traps flash insertion removal
snmp-server enable traps hsrp
snmp-server enable traps config
snmp-server enable traps entity
snmp-server enable traps cpu threshold
snmp-server enable traps config-copy
snmp-server enable traps envmon
snmp-server enable traps aaa_server
snmp-server enable traps bgp
snmp-server enable traps ospf state-change
snmp-server enable traps ospf errors
snmp-server enable traps ospf retransmit
snmp-server enable traps ospf lsa
snmp-server enable traps ospf cisco-specific state-change nssa-trans-change
snmp-server enable traps ospf cisco-specific state-change shamlink interface
snmp-server enable traps ospf cisco-specific state-change shamlink neighbor
snmp-server enable traps ospf cisco-specific errors
snmp-server enable traps ospf cisco-specific retransmit
snmp-server enable traps ospf cisco-specific lsa
snmp-server enable traps pim neighbor-change rp-mapping-change invalid-pim-message
snmp-server enable traps ipmulticast
snmp-server enable traps msdp
snmp-server enable traps rsvp
snmp-server enable traps frame-relay
snmp-server enable traps frame-relay subif
snmp-server enable traps rtr
snmp-server enable traps syslog
snmp-server enable traps stun
snmp-server enable traps dlsw
snmp-server enable traps bstun
snmp-server enable traps pppoe
snmp-server enable traps l2tun session
snmp-server enable traps dial
snmp-server enable traps dsp card-status
snmp-server enable traps voice poor-qov
snmp-server enable traps dnis
snmp-server host 10.12.15.56 public
!
!
control-plane
!
!
!
```

```
voice-port 6/0:D
!
voice-port 6/1:D
!
voice-port 6/2:D
!
voice-port 6/3:D
!
voice-port 6/4:D
!
voice-port 6/5:D
!
voice-port 6/6:D
!
voice-port 6/7:D
!
voice-port 7/0:D
!
voice-port 7/1:D
!
voice-port 7/2:D
!
voice-port 7/3:D
!
voice-port 7/4:D
!
voice-port 7/5:D
!
voice-port 7/6:D
!
voice-port 7/7:D
!
!
dial-peer cor custom
!
!
dial-peer voice 1000 voip
 destination-pattern 601616[8-9]...
 voice-class codec 1
 session target ras
 incoming called-number 601616[8-9]...
 tech-prefix 2#
 dtmf-relay rtp-nte h245-signal h245-alphanumeric
 no vad
!
dial-peer voice 2000 pots
 incoming called-number 601616[8-9]...
 no digit-strip
 direct-inward-dial
 port 6/0:D
!
dial-peer voice 2001 pots
 incoming called-number 601616[8-9]...
 no digit-strip
 direct-inward-dial
 port 6/1:D
!
dial-peer voice 2002 pots
 incoming called-number 601616[8-9]...
 no digit-strip
 direct-inward-dial
 port 6/2:D
!
dial-peer voice 2003 pots
```

```
 incoming called-number 601616[8-9]...
 no digit-strip
 direct-inward-dial
 port 6/3:D
!
dial-peer voice 2004 pots
 incoming called-number 601616[8-9]...
 no digit-strip
 direct-inward-dial
 port 6/4:D
!
dial-peer voice 2005 pots
 incoming called-number 601616[8-9]...
 no digit-strip
 direct-inward-dial
 port 6/5:D
!
dial-peer voice 2006 pots
 incoming called-number 601616[8-9]...
 no digit-strip
 direct-inward-dial
 port 6/6:D
!
dial-peer voice 2007 pots
 incoming called-number 601616[8-9]...
 no digit-strip
 direct-inward-dial
 port 6/7:D
!
dial-peer voice 2008 pots
 incoming called-number 601616[8-9]...
 no digit-strip
 direct-inward-dial
 port 7/0:D
!
dial-peer voice 2009 pots
 incoming called-number 601616[8-9]...
 no digit-strip
 direct-inward-dial
 port 7/1:D
!
dial-peer voice 2010 pots
 incoming called-number 601616[8-9]...
 no digit-strip
 direct-inward-dial
 port 7/2:D
!
dial-peer voice 2011 pots
 incoming called-number 601616[8-9]...
 no digit-strip
 direct-inward-dial
 port 7/3:D
!
dial-peer voice 2012 pots
 incoming called-number 601616[8-9]...
 no digit-strip
 direct-inward-dial
 port 7/4:D
!
dial-peer voice 2013 pots
 incoming called-number 601616[8-9]...
 no digit-strip
 direct-inward-dial
 port 7/5:D
```

```
!
dial-peer voice 2014 pots
 incoming called-number 601616[8-9]...
 no digit-strip
 direct-inward-dial
 port 7/6:D
!
dial-peer voice 2015 pots
 incoming called-number 601616[8-9]...
 no digit-strip
 direct-inward-dial
 port 7/7:D
!
dial-peer voice 100 voip
 service vru-leg
 voice-class codec 1
 session target ras
 incoming called-number 6666666666T
 dtmf-relay rtp-nte h245-signal h245-alphanumeric
 no vad
!
!
gateway
 timer receive-rtp 1200
!
ss7 mtp2-variant Bellcore 0
ss7 mtp2-variant Bellcore 1
ss7 mtp2-variant Bellcore 2
ss7 mtp2-variant Bellcore 3
!
line con 0
line aux 0
line vty 0 4
 exec-timeout 0 0
 password any
 login
line 1/00 2/59
 modem InOut
line 3/00 3/107
 modem InOut
line 5/00 5/107
 modem InOut
!
scheduler allocate 10000 400
ntp clock-period 17179963
ntp server 10.12.16.97
end
```

Site6 Cisco7206VXR Router

```
version 12.4
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname PS6-7206
!
boot-start-marker
boot system disk0:c7200-jk8s-mz.124-5.13.T2
boot-end-marker
!
enable secret 5 $1$lTWp$4S8MpolQ3bkMoFRNeeKK60
```

```
enable password any
!
no aaa new-model
!
resource policy
!
clock timezone EST -5
clock summer-time EDT recurring
!
!
ip cef
ip domain name sjc.com
ip name-server 10.12.15.67
ip name-server 10.12.11.67
no ip dhcp use vrf connected
!
ip dhcp pool ps6-phones
   network 10.12.16.224 255.255.255.224
   dns-server 10.12.15.67 10.12.11.67
   domain-name sjc.com
   option 150 ip 10.12.15.2
   default-router 10.12.16.225
!
!
interface FastEthernet0/0
 no ip address
 duplex full
 speed 100
!
interface FastEthernet0/0.1
 encapsulation dot1Q 608
 ip address 10.12.16.65 255.255.255.248
 no snmp trap link-status
!
interface FastEthernet0/0.2
 encapsulation dot1Q 611
 ip address 10.12.16.97 255.255.255.240
 no snmp trap link-status
!
interface FastEthernet0/0.3
 encapsulation dot1Q 614
 ip address 10.12.16.177 255.255.255.248
 no snmp trap link-status
!
interface FastEthernet0/0.4
 encapsulation dot1Q 615
 ip address 10.12.16.193 255.255.255.248
 no snmp trap link-status
!
interface FastEthernet0/0.5
 encapsulation dot1Q 616
 ip address 10.12.16.209 255.255.255.240
 no snmp trap link-status
!
interface FastEthernet0/0.6
 encapsulation dot1Q 617
 ip address 10.12.16.225 255.255.255.224
 no snmp trap link-status
!
interface FastEthernet0/0.7
!
interface FastEthernet0/1
 description connect to PS0-MGMT1 port 18 patch U14/12
 ip address 10.12.1.19 255.255.255.0
```

```
 duplex full
 speed 100
 no mop enabled
!
interface Serial2/0
 no ip address
 encapsulation frame-relay
 no keepalive
 dsu bandwidth 44210
 framing c-bit
 cablelength 10
 serial restart-delay 0
!
interface Serial2/0.1 point-to-point
 ip address 10.12.2.21 255.255.255.252
 frame-relay interface-dlci 600
!
router ospf 1
 log-adjacency-changes
 area 6 stub no-summary
 network 10.12.2.0 0.0.0.255 area 0
 network 10.12.16.0 0.0.0.255 area 6
!
!
no ip http server
no ip http secure-server
!
!
logging alarm informational
snmp-server community private RW
snmp-server community public RO
snmp-server enable traps snmp authentication linkdown linkup coldstart warmstart
snmp-server enable traps vrrp
snmp-server enable traps ds1
snmp-server enable traps tty
snmp-server enable traps eigrp
snmp-server enable traps casa
snmp-server enable traps gatekeeper
snmp-server enable traps xgcp
snmp-server enable traps bulkstat collection transfer
snmp-server enable traps director server-up server-down
snmp-server enable traps isdn call-information
snmp-server enable traps isdn layer2
snmp-server enable traps isdn chan-not-avail
snmp-server enable traps isdn ietf
snmp-server enable traps ds3
snmp-server enable traps atm subif
snmp-server enable traps channel
snmp-server enable traps ima
snmp-server enable traps srp
snmp-server enable traps flash insertion removal
snmp-server enable traps hsrp
snmp-server enable traps config
snmp-server enable traps entity
snmp-server enable traps fru-ctrl
snmp-server enable traps cpu threshold
snmp-server enable traps config-copy
snmp-server enable traps envmon
snmp-server enable traps aaa_server
snmp-server enable traps bgp
snmp-server enable traps ospf state-change
snmp-server enable traps ospf errors
snmp-server enable traps ospf retransmit
snmp-server enable traps ospf lsa
```

```
snmp-server enable traps ospf cisco-specific state-change nssa-trans-change
snmp-server enable traps ospf cisco-specific state-change shamlink interface-old
snmp-server enable traps ospf cisco-specific state-change shamlink neighbor
snmp-server enable traps ospf cisco-specific errors
snmp-server enable traps ospf cisco-specific retransmit
snmp-server enable traps ospf cisco-specific lsa
snmp-server enable traps pim neighbor-change rp-mapping-change invalid-pim-message
snmp-server enable traps ipmulticast
snmp-server enable traps mvpn
snmp-server enable traps msdp
snmp-server enable traps rsvp
snmp-server enable traps frame-relay
snmp-server enable traps frame-relay subif
snmp-server enable traps syslog
snmp-server enable traps rtr
snmp-server enable traps vsimaster
snmp-server enable traps mpls ldp
snmp-server enable traps mpls traffic-eng
snmp-server enable traps mpls vpn
snmp-server enable traps cnpd
snmp-server enable traps stun
snmp-server enable traps dlsw
snmp-server enable traps bstun
snmp-server enable traps pppoe
snmp-server enable traps l2tun session
snmp-server enable traps ipmobile
snmp-server enable traps dial
snmp-server enable traps dsp card-status
snmp-server enable traps isakmp policy add
snmp-server enable traps isakmp policy delete
snmp-server enable traps isakmp tunnel start
snmp-server enable traps isakmp tunnel stop
snmp-server enable traps ipsec cryptomap add
snmp-server enable traps ipsec cryptomap delete
snmp-server enable traps ipsec cryptomap attach
snmp-server enable traps ipsec cryptomap detach
snmp-server enable traps ipsec tunnel start
snmp-server enable traps ipsec tunnel stop
snmp-server enable traps ipsec too-many-sas
snmp-server enable traps event-manager
snmp-server enable traps alarms informational
snmp-server enable traps voice fallback poor-qov
snmp-server enable traps dnis
snmp-server host 10.12.15.56 public
!
!
control-plane
!
!
gatekeeper
 shutdown
!
!
line con 0
 stopbits 1
line aux 0
 stopbits 1
line vty 0 4
 exec-timeout 0 0
 password any
 login
!
ntp clock-period 17180086
ntp server 10.12.1.1
```

```
                    !
                    end
```

Site7 Cisco 6506 MSFC Switch

```
            version 12.1
            service nagle
            no service pad
            service timestamps debug datetime msec localtime
            service timestamps log datetime msec localtime
            no service password-encryption
            !
            hostname ps7-6506-msfc
            !
            boot system bootflash:c6msfc2-psv-mz.121-26.E3.bin
            boot system bootflash:c6msfc2-psv-mz.121-26.E2.bin
            boot bootldr bootflash:c6msfc2-boot-mz.121-11b.E4.bin
            enable password any
            !
            clock timezone US_Eastern -5
            clock summer-time US_EDT recurring
            clock calendar-valid
            ip subnet-zero
            no ip source-route
            !
            !
            ip ftp username vtgrtp
            ip ftp password any
            ip domain-name sjc.com
            ip name-server 10.12.15.67
            ip name-server 10.12.11.67
            !
            ip dhcp pool ps7-phones
               network 10.12.17.224 255.255.255.224
               dns-server 10.12.15.67 10.12.11.67
               domain-name sjc.com
               option 150 ip 10.12.15.2
               default-router 10.12.17.225
            !
            ip multicast-routing
            mls rp ip
            !
            !
            interface Loopback0
             ip address 169.254.5.1 255.255.0.0
             no ip route-cache
             no ip mroute-cache
            !
            interface Vlan1
             no ip address
             no ip redirects
             no ip unreachables
             shutdown
            !
            interface Vlan10
             description Mangement
             ip address 10.12.1.48 255.255.255.0
             no ip redirects
             no ip unreachables
            !
            interface Vlan701
             description PS7_CM1
```

```
 ip address 10.12.17.1 255.255.255.248
 no ip redirects
 no ip unreachables
!
interface Vlan705
 description PS7_PG7
 ip address 10.12.17.33 255.255.255.240
 no ip redirects
 no ip unreachables
!
interface Vlan710
 description PS7_IOS_CAT
 ip address 10.12.17.97 255.255.255.240
 no ip redirects
 no ip unreachables
!
interface Vlan711
 description PS7_CMM_GW1_XCB
 ip address 10.12.17.113 255.255.255.248
 no ip redirects
 no ip unreachables
!
interface Vlan714
 description PS7-Desktops
 ip address 10.12.17.177 255.255.255.248
 no ip redirects
 no ip unreachables
!
interface Vlan715
 description PS7_CAM1_2
 ip address 10.12.17.193 255.255.255.248
 no ip redirects
 no ip unreachables
!
interface Vlan716
 description PS7_CIL1_2
 ip address 10.12.17.209 255.255.255.240
 no ip redirects
 no ip unreachables
!
interface Vlan717
 description PS7-Phones
 ip address 10.12.17.225 255.255.255.224
 no ip redirects
 no ip unreachables
!
router ospf 1
 log-adjacency-changes
 area 7 stub
 network 10.12.2.0 0.0.0.255 area 0
 network 10.12.17.0 0.0.0.255 area 7
!
ip classless
no ip http server
!
!
ip access-list extended BLOCK_RTP
 deny    udp any any range 16383 16384
 permit ip any any
snmp-server community public RO
snmp-server community private RW
snmp-server system-shutdown
snmp-server enable traps snmp authentication warmstart linkdown linkup coldstart
snmp-server enable traps slb real virtual csrp
```

```
snmp-server enable traps flash insertion removal
snmp-server enable traps hsrp
snmp-server enable traps config
snmp-server enable traps entity
snmp-server enable traps config-copy
snmp-server enable traps fru-ctrl
snmp-server enable traps bgp
snmp-server enable traps rsvp
snmp-server enable traps frame-relay
snmp-server enable traps rtr
snmp-server enable traps isdn call-information
snmp-server enable traps isdn layer2
snmp-server enable traps dlsw
snmp-server host 10.12.15.56 public
!
banner motd


alias configure ro router ospf
alias exec c conf t
alias exec ipr sh ip route
alias exec sion sh ip ospf nei
alias exec cipr clear ip route
!
line con 0
 exec-timeout 0 0
 privilege level 15
 logging synchronous
line vty 0 4
 password any
 login
!
exception protocol ftp
exception dump 10.12.13.212
ntp clock-period 17179894
ntp update-calendar
ntp server 10.12.2.1
!
end
```

Site8 Cisco 3845 Gateway1

```
version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname PS8-3845-GW1
!
boot-start-marker
boot system flash c3845-ipvoice-mz.124-5.13.T2
boot-end-marker
!
logging buffered 51200 warnings
enable password any
!
no aaa new-model
!
resource policy
!
clock timezone EST -5
```

```
clock summer-time EDT recurring
ip cef
!
!
ip domain name sjc.com
ip host isn-vxml 10.12.15.51
ip host isn-vxml-backup 10.12.15.50
ip name-server 10.12.15.67
ip name-server 10.12.11.67
voice-card 0
 no dspfarm
!
!
voice service voip
 h323
!
!
voice class codec 1
 codec preference 1 g711ulaw
 codec preference 2 g728
!
!
application
 service vru-leg flash:bootstrap.tcl
  paramspace english index 0
  paramspace english language en
  paramspace english location flash
  paramspace english prefix en
 !
 service new-call flash:bootstrap.vxml
  paramspace english index 0
  paramspace english language en
  paramspace english location flash
  paramspace english prefix en
 !
 service handoff flash:handoff.tcl
  paramspace english index 0
  paramspace english language en
  paramspace english location flash
  paramspace english prefix en
 !
!
username lab privilege 15 secret 5 $1$gODC$agrhrLh1nKyqn1r0c.Q.T.
!
!
interface GigabitEthernet0/0
 ip address 10.12.18.99 255.255.255.240
 duplex full
 speed 100
 media-type rj45
 negotiation auto
 h323-gateway voip interface
 h323-gateway voip id PS5-CVP-ZONE ipaddr 10.12.15.99 1719 priority 120
 h323-gateway voip h323-id PS8-3845-GW1
 h323-gateway voip tech-prefix 1#
 h323-gateway voip bind srcaddr 10.12.18.99
!
interface GigabitEthernet0/1
 ip address 10.12.1.31 255.255.255.0
 duplex full
 speed 100
 media-type rj45
 negotiation auto
!
```

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```
ip route 0.0.0.0 0.0.0.0 10.12.18.97
!
ip http server
ip http authentication local
ip http timeout-policy idle 600 life 86400 requests 10000
!
snmp-server community private RW
snmp-server community public RO
snmp-server enable traps snmp authentication linkdown linkup coldstart warmstart
snmp-server enable traps vrrp
snmp-server enable traps tty
snmp-server enable traps xgcp
snmp-server enable traps flash insertion removal
snmp-server enable traps envmon
snmp-server enable traps icsudsu
snmp-server enable traps isdn call-information
snmp-server enable traps isdn layer2
snmp-server enable traps isdn chan-not-avail
snmp-server enable traps isdn ietf
snmp-server enable traps ds0-busyout
snmp-server enable traps ds1-loopback
snmp-server enable traps atm subif
snmp-server enable traps cnpd
snmp-server enable traps config-copy
snmp-server enable traps config
snmp-server enable traps dial
snmp-server enable traps dsp card-status
snmp-server enable traps entity
snmp-server enable traps frame-relay
snmp-server enable traps frame-relay subif
snmp-server enable traps hsrp
snmp-server enable traps ipmobile
snmp-server enable traps ipmulticast
snmp-server enable traps ospf state-change
snmp-server enable traps ospf errors
snmp-server enable traps ospf retransmit
snmp-server enable traps ospf lsa
snmp-server enable traps ospf cisco-specific state-change nssa-trans-change
snmp-server enable traps ospf cisco-specific state-change shamlink interface
snmp-server enable traps ospf cisco-specific state-change shamlink neighbor
snmp-server enable traps ospf cisco-specific errors
snmp-server enable traps ospf cisco-specific retransmit
snmp-server enable traps ospf cisco-specific lsa
snmp-server enable traps pim neighbor-change rp-mapping-change invalid-pim-message
snmp-server enable traps pppoe
snmp-server enable traps cpu threshold
snmp-server enable traps rsvp
snmp-server enable traps rtr
snmp-server enable traps syslog
snmp-server enable traps l2tun session
snmp-server enable traps vtp
snmp-server enable traps voice poor-qov
snmp-server enable traps dnis
snmp-server host 10.12.15.56 public
!
!
control-plane
!
!
dial-peer voice 1 voip
 tech-prefix 1#
!
dial-peer voice 2000 voip
 service vru-leg
```

```
 voice-class codec 1
 session target ras
 incoming called-number 8888888888T
 dtmf-relay rtp-nte h245-signal h245-alphanumeric
 clid restrict
 no vad
!
gateway
 timer receive-rtp 1200
!
!
line con 0
 login local
 stopbits 1
line aux 0
 stopbits 1
line vty 0 4
 exec-timeout 0 0
 password any
 login
line vty 5 15
 privilege level 15
 login local
!
scheduler allocate 20000 1000
ntp server 10.12.18.97
!
end
```

Cisco Unified Outbound Dialer Call Flow Components

Listed in this section are configuration commands for the Cisco 5400 voice gateway that is involved in handling the Cisco Unified Outbound Dialer Call Flow in Test Bed 2.

- Site6 Cisco 5400 Voice Gateway

Site6 Cisco 5400 Voice Gateway

```
!
version 12.4
service timestamps debug datetime msec localtime
service timestamps log datetime msec localtime
no service password-encryption
service internal
!
hostname PS6-5400-GW5
!
boot-start-marker
boot system flash:c5400-is-mz.124-5.13.T2
no boot startup-test
boot-end-marker
!
logging buffered 1000000 debugging
enable password any
!
!
!
resource-pool disable
no aaa new-model
```

```
!
resource policy
!
clock timezone EDT -5
clock summer-time EST recurring
tdm clock priority 1 7/0
spe default-firmware spe-firmware-1
!
!
ip cef
ip domain name sjc.com
ip host isn-vxml 10.12.11.51
ip host isn-vxml-backup 10.12.11.50
ip name-server 10.12.15.67
ip name-server 10.12.11.67
!
!
isdn switch-type primary-dms100
!
!
voice service voip
 fax protocol t38 ls-redundancy 0 hs-redundancy 0 fallback none
 h323
 modem passthrough none codec g729r8 pre-ietf
!
!
voice class codec 1
 codec preference 1 g711ulaw
 codec preference 2 g729r8
!
voice class codec 711
 codec preference 1 g711ulaw
!
!
application
 service vru-leg flash:Bootstrap.tcl
  paramspace english index 0
  paramspace english language en
  paramspace english location flash
  paramspace english prefix en
 !
 service new-call flash:bootstrap.vxml
  paramspace english index 0
  paramspace english language en
  paramspace english location flash
  paramspace english prefix en
 !
 service handoff flash:handoff.tcl
  paramspace english index 0
  paramspace english language en
  paramspace english location flash
  paramspace english prefix en
 !
!
fax interface-type fax-mail
!
!
controller T1 6/0
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 6/1
 framing esf
```

```
   linecode b8zs
 pri-group timeslots 1-24
!
controller T1 6/2
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 6/3
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 6/4
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 6/5
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 6/6
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 6/7
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/0
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/1
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/2
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/3
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/4
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/5
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/6
```

```
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 7/7
 framing esf
 linecode b8zs
 pri-group timeslots 1-24
!
!
interface FastEthernet0/0
 ip address 10.12.16.105 255.255.255.240
 logging event link-status
 duplex full
 speed 100
 h323-gateway voip interface
 h323-gateway voip id PS1-CVP-ZONE ipaddr 10.12.11.99 1719 priority 120
 h323-gateway voip h323-id PS6-5400-GW5
 h323-gateway voip tech-prefix 1#
 h323-gateway voip bind srcaddr 10.12.16.105
!
interface FastEthernet0/1
 ip address 10.12.1.57 255.255.255.0
 duplex full
 speed 100
!
interface Serial0/0
 no ip address
 shutdown
 clock rate 2000000
!
interface Serial6/0
 no ip address
 shutdown
!
interface Serial7/0
 no ip address
 shutdown
!
interface Serial0/1
 no ip address
 shutdown
 clock rate 2000000
!
interface Serial6/0:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn protocol-emulate network
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/1:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn protocol-emulate network
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/2:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
```

```
 isdn protocol-emulate network
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/3:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn protocol-emulate network
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/4:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn protocol-emulate network
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/5:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn protocol-emulate network
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/6:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn protocol-emulate network
 isdn incoming-voice modem
 no cdp enable
!
interface Serial6/7:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn protocol-emulate network
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/0:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn protocol-emulate network
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/1:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn protocol-emulate network
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/2:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
```

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```
 isdn protocol-emulate network
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/3:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn protocol-emulate network
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/4:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn protocol-emulate network
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/5:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn protocol-emulate network
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/6:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn protocol-emulate network
 isdn incoming-voice modem
 no cdp enable
!
interface Serial7/7:23
 no ip address
 encapsulation hdlc
 isdn switch-type primary-dms100
 isdn protocol-emulate network
 isdn incoming-voice modem
 no cdp enable
!
interface Group-Async0
 no ip address
 encapsulation slip
 group-range 1/00 5/107
!
!
ip route 0.0.0.0 0.0.0.0 10.12.16.97
no ip http server
!
!
snmp-server community public RO
snmp-server community private RW
snmp-server enable traps snmp authentication linkdown linkup coldstart warmstart
snmp-server enable traps vrrp
snmp-server enable traps calltracker
snmp-server enable traps tty
snmp-server enable traps xgcp
snmp-server enable traps modem-health
snmp-server enable traps ds0-busyout
snmp-server enable traps ds1-loopback
```

```
snmp-server enable traps cnpd
snmp-server enable traps isdn call-information
snmp-server enable traps isdn layer2
snmp-server enable traps isdn chan-not-avail
snmp-server enable traps isdn ietf
snmp-server enable traps fru-ctrl
snmp-server enable traps flash insertion removal
snmp-server enable traps hsrp
snmp-server enable traps config
snmp-server enable traps entity
snmp-server enable traps cpu threshold
snmp-server enable traps config-copy
snmp-server enable traps envmon
snmp-server enable traps aaa_server
snmp-server enable traps bgp
snmp-server enable traps ospf state-change
snmp-server enable traps ospf errors
snmp-server enable traps ospf retransmit
snmp-server enable traps ospf lsa
snmp-server enable traps ospf cisco-specific state-change nssa-trans-change
snmp-server enable traps ospf cisco-specific state-change shamlink interface
snmp-server enable traps ospf cisco-specific state-change shamlink neighbor
snmp-server enable traps ospf cisco-specific errors
snmp-server enable traps ospf cisco-specific retransmit
snmp-server enable traps ospf cisco-specific lsa
snmp-server enable traps pim neighbor-change rp-mapping-change invalid-pim-message
snmp-server enable traps ipmulticast
snmp-server enable traps msdp
snmp-server enable traps rsvp
snmp-server enable traps frame-relay
snmp-server enable traps frame-relay subif
snmp-server enable traps rtr
snmp-server enable traps syslog
snmp-server enable traps stun
snmp-server enable traps dlsw
snmp-server enable traps bstun
snmp-server enable traps pppoe
snmp-server enable traps l2tun session
snmp-server enable traps dial
snmp-server enable traps dsp card-status
snmp-server enable traps voice poor-qov
snmp-server enable traps dnis
snmp-server host 10.12.15.56 public
!
!
control-plane
!
!
voice-port 6/0:D
!
voice-port 6/1:D
!
voice-port 6/2:D
!
voice-port 6/3:D
!
voice-port 6/4:D
!
voice-port 6/5:D
!
voice-port 6/6:D
!
voice-port 6/7:D
!
```

```
voice-port 7/0:D
!
voice-port 7/1:D
!
voice-port 7/2:D
!
voice-port 7/3:D
!
voice-port 7/4:D
!
voice-port 7/5:D
!
voice-port 7/6:D
!
voice-port 7/7:D
!
!
!
dial-peer voice 1 voip
 tech-prefix 1#
!
dial-peer voice 3 voip
 tone ringback alert-no-PI
 voice-class codec 711
 session target ras
 incoming called-number 91950.....
 dtmf-relay rtp-nte h245-signal h245-alphanumeric
!
dial-peer voice 1003 pots
 destination-pattern 919501....
 no digit-strip
 direct-inward-dial
 port 6/0:D
!
dial-peer voice 1004 pots
 destination-pattern 919501....
 no digit-strip
 direct-inward-dial
 port 6/1:D
!
dial-peer voice 1005 pots
 destination-pattern 919501....
 no digit-strip
 direct-inward-dial
 port 6/2:D
!
dial-peer voice 1006 pots
 destination-pattern 919501....
 no digit-strip
 direct-inward-dial
 port 6/3:D
!
dial-peer voice 3001 pots
 destination-pattern 919503....
 no digit-strip
 direct-inward-dial
 port 6/5:D
!
dial-peer voice 3002 pots
 destination-pattern 919503....
 no digit-strip
 direct-inward-dial
 port 6/6:D
!
```

```
dial-peer voice 3003 pots
 tone ringback alert-no-PI
 destination-pattern 919503....
 no digit-strip
 direct-inward-dial
 port 6/7:D
!
dial-peer voice 1009 pots
 destination-pattern 919502....
 no digit-strip
 direct-inward-dial
 port 6/4:D
!
dial-peer voice 1000 voip
 destination-pattern 601616[8-9]...
 voice-class codec 1
 session target ras
 incoming called-number 601616[8-9]...
 tech-prefix 2#
 dtmf-relay rtp-nte h245-signal h245-alphanumeric
 no vad
!
dial-peer voice 100 voip
 service vru-leg
 voice-class codec 1
 session target ras
 incoming called-number 6666666666T
 dtmf-relay rtp-nte h245-signal h245-alphanumeric
 no vad
!
dial-peer voice 101 voip
 service vru-leg
 voice-class codec 1
 session target ras
 incoming called-number 5555555555T
 dtmf-relay rtp-nte h245-signal h245-alphanumeric
 no vad
!
!
gateway
 timer receive-rtp 1200
!
no environment
ss7 mtp2-variant Bellcore 0
ss7 mtp2-variant Bellcore 1
ss7 mtp2-variant Bellcore 2
ss7 mtp2-variant Bellcore 3
!
line con 0
line aux 0
line vty 0 4
 exec-timeout 0 0
 password any
 login
line vty 5 99
 no login
line 1/00 2/59
 no flush-at-activation
 modem InOut
line 3/00 3/107
 no flush-at-activation
 modem InOut
line 5/00 5/107
 no flush-at-activation
```

```
 modem InOut
!
scheduler allocate 10000 400
ntp clock-period 17179889
end
```