

CCIE Collaboration Home Lab Topology and Base Configurations

by

**Kevin Wallace, CCIE #7945
(Collaboration and R/S)**

kwtrain.com


```

crypto pki trustpoint TP-self-signed-4221020544
  enrollment selfsigned
  subject-name cn=IOS-Self-Signed-Certificate-4221020544
  revocation-check none
  rsakeypair TP-self-signed-4221020544
!
!
crypto pki certificate chain TP-self-signed-4221020544
  certificate self-signed 01
    3082023C 308201A5 A0030201 02020101 300D0609 2A864886 F70D0101 04050030
    131312F30 2D060355 04031326 494F532D 53656C66 2D536967 6E65642D 43657274
    69666963 6174652D 34323231 30323035 3434301E 170D3933 30333031 30303031
    34385A17 0D323030 31303130 30303030 305A3031 312F302D 06035504 03132649
    4F532D53 656C662D 5369676E 65642D43 65727469 66696361 74652D34 32323130
    32303534 3430819F 300D0609 2A864886 F70D0101 01050003 818D0030 81890281
    8100A943 8A08D7A8 998E5940 E7FBD4DE 5739FDE1 E41961A9 2E8EE36B 45CC0E11
    F171CCED 5DE38ACE ACA32380 4080A5B5 2431AFA5 8050A20D A596C258 84C6B5AD
    08A8F62D 25119AF2 F3DA4265 E988DB7A C8B7B70A B3B7AF33 F1C42992 9C296B04
    882F2617 431B4704 7CCE46BF 72306494 B48F137E 1B034566 E37DF34C 15DEAD66
    C22F0203 010001A3 64306230 0F060355 1D130101 FF040530 030101FF 300F0603
    551D1104 08300682 04535731 2E301F06 03551D23 04183016 8014CD56 AB802995
    8477117C BAA7F6C4 0ADC59E3 A458301D 0603551D 0E041604 14CD56AB 80299584
    77117CBA A7F6C40A DC59E3A4 58300D06 092A8648 86F70D01 01040500 03818100
    18782CD8 878941D7 5442B651 AC5DC14E EDC041D5 DE38C126 689FB661 9192199D
    B9FE3186 A6E5C4F1 CCD652BC 680C99E4 83843ECE 417B3F62 60F9FFB9 1EAF85CA
    3775A60D 39DABB98 9AEE3CC3 1250DE7E C2F5E894 E185962E AEB809BF E62D506A
    120D8B9E 74654187 DE561036 1B9E7880 A00ED7D4 A7587DE7 EC8AA43B 8610D678
  quit
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
vlan internal allocation policy ascending
!
!
!
interface FastEthernet1/0/1
  switchport access vlan 100
!
interface FastEthernet1/0/2
  switchport access vlan 100
!
interface FastEthernet1/0/3
!
interface FastEthernet1/0/4
!
interface FastEthernet1/0/5
!
interface FastEthernet1/0/6
!
interface FastEthernet1/0/7
  switchport access vlan 300
  switchport voice vlan 200
  spanning-tree portfast
!

```

```

interface FastEthernet1/0/8
  switchport access vlan 300
  switchport voice vlan 200
  spanning-tree portfast
!
interface FastEthernet1/0/9
!
interface FastEthernet1/0/10
!
interface FastEthernet1/0/11
!
interface FastEthernet1/0/12
!
interface FastEthernet1/0/13
!
interface FastEthernet1/0/14
!
interface FastEthernet1/0/15
!
interface FastEthernet1/0/16
!
interface FastEthernet1/0/17
!
interface FastEthernet1/0/18
!
interface FastEthernet1/0/19
!
interface FastEthernet1/0/20
!
interface FastEthernet1/0/21
!
interface FastEthernet1/0/22
!
interface FastEthernet1/0/23
!
interface FastEthernet1/0/24
  switchport trunk encapsulation dot1q
  switchport mode trunk
!
interface GigabitEthernet1/0/1
!
interface GigabitEthernet1/0/2
!
interface Vlan1
  no ip address
  shutdown
!
interface Vlan100
  ip address 192.168.1.80 255.255.255.0
!
ip classless
ip http server
ip http secure-server
!
ip sla enable reaction-alerts
no cdp advertise-v2
cdp timer 5

```

```

!
!
line con 0
  exec-timeout 0 0
  logging synchronous
line vty 0 4
  login
line vty 5 15
  login
!
end

```

Initial Configuration of HQ Router

HQ#**show run**

Building configuration...

```

Current configuration : 4381 bytes
!
! Last configuration change at 20:22:18 UTC Thu Sep 3 2015 by cisco
version 15.2
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname HQ
!
boot-start-marker
boot-end-marker
!
!
card type t1 0 0
logging buffered 51200 warnings
enable secret 4 tnhtc92DXBhelxjYk8LWJrPV36S2i4ntXrpb4RFmfqY
!
no aaa new-model
no network-clock-participate wic 0
!
ip cef
!
!
!
ip dhcp excluded-address 10.10.10.1
!
!
!
no ip domain lookup
no ipv6 cef
multilink bundle-name authenticated
!
!
!
!
!
!

```

```

crypto pki trustpoint TP-self-signed-2136404343
  enrollment selfsigned
  subject-name cn=IOS-Self-Signed-Certificate-2136404343
  revocation-check none
  rsakeypair TP-self-signed-2136404343
!
!
crypto pki certificate chain TP-self-signed-2136404343
  certificate self-signed 01
    3082022B 30820194 A0030201 02020101 300D0609 2A864886 F70D0101 05050030
    31312F30 2D060355 04031326 494F532D 53656C66 2D536967 6E65642D 43657274
    69666963 6174652D 32313336 34303433 3433301E 170D3133 30363238 30323434
    30395A17 0D323030 31303130 30303030 305A3031 312F302D 06035504 03132649
    4F532D53 656C662D 5369676E 65642D43 65727469 66696361 74652D32 31333634
    30343334 3330819F 300D0609 2A864886 F70D0101 01050003 818D0030 81890281
    81008A62 2482A40E F3E36150 A11F7CF6 E55D8662 840672FC B7B4B14B F99D5AC2
    7937B260 F8AD2D0E 638655D8 F96C01E0 D2B22FAB C5112ED8 597D4507 7379A50B
    9EB48762 BA0474F0 E7883B86 E201B4CC 9EB100CA BDC889A9 3022615C CA2EAB77
    9DD51DEA 956D6BB9 792836C5 0556EA75 F6518C79 62C133F5 3881B58A C64E1EF0
    31570203 010001A3 53305130 0F060355 1D130101 FF040530 030101FF 301F0603
    551D2304 18301680 149B0E84 AEF12589 6E46FB18 38FE80DC 7971F815 A5301D06
    03551D0E 04160414 9B0E84AE F125896E 46FB1838 FE80DC79 71F815A5 300D0609
    2A864886 F70D0101 05050003 81810088 EC6CD455 80619269 7FAA646B 7155B671
    69AA31AF 486EF9C7 BA2C0BAC D956DF54 C44DAD1D 8F8849EC 5B1A5889 3EC6F3E9
    112A5801 543D9927 82F46CCB 59C5DC90 3F3A8FE1 11079927 E7A651B3 3789C69C
    5D9EE330 CD1493A9 EF6DFBE5 5161A7C9 885CF68A 5EB8FDA5 4DC3F56C 085513EB
    FAC6B6D 9A6B5D4D 978DD68E 4671D6
  quit
voice-card 0
!
!
!
voice service voip
  fax protocol t38 version 0 ls-redundancy 0 hs-redundancy 0 fallback none
!
!
!
!
!
!
license udi pid CISC02911/K9 sn FTX1726AL7J
hw-module pvdn 0/0
!
hw-module pvdn 0/1
!
!
!
username cisco secret 4 tnhtc92DXBhelxjYk8LWJrPV36S2i4ntXrpb4RFmfqY
!
redundancy
!
!
controller T1 0/0/0
  cablelength long 0db
!
!
!

```

```

!
!
interface Loopback0
 ip address 10.10.32.1 255.255.255.255
!
interface Embedded-Service-Engine0/0
 no ip address
 shutdown
!
interface GigabitEthernet0/0
 description $ETH-LAN$$ETH-SW-LAUNCH$$INTF-INFO-GE 0/0$
 no ip address
 duplex auto
 speed auto
!
interface GigabitEthernet0/0.100
 encapsulation dot1Q 100
 ip address 192.168.1.77 255.255.255.0
!
interface GigabitEthernet0/0.200
 encapsulation dot1Q 200
 ip address 10.10.120.1 255.255.255.0
!
interface GigabitEthernet0/0.300
 encapsulation dot1Q 300 native
 ip address 10.10.130.1 255.255.255.0
!
interface GigabitEthernet0/1
 no ip address
 shutdown
 duplex auto
 speed auto
!
interface GigabitEthernet0/2
 no ip address
 shutdown
 duplex auto
 speed auto
!
interface Serial0/1/0
 no ip address
 encapsulation frame-relay IETF
!
interface Serial0/1/0.1 point-to-point
 ip address 10.10.33.1 255.255.255.128
 frame-relay interface-dlci 102
!
interface Serial0/1/0.2 point-to-point
 ip address 10.10.33.129 255.255.255.128
 frame-relay interface-dlci 103
!
router ospf 100
 network 0.0.0.0 255.255.255.255 area 0
!
ip forward-protocol nd
!
ip http server

```

```

ip http access-class 23
ip http authentication local
ip http secure-server
ip http timeout-policy idle 60 life 86400 requests 10000
!
ip route 0.0.0.0 0.0.0.0 192.168.1.1
!
access-list 23 permit 10.10.10.0 0.0.0.7
!
!
!
control-plane
!
!
!
!
!
!
!
mgcp profile default
!
!
!
!
!
gatekeeper
shutdown
!
!
!
line con 0
  exec-timeout 0 0
  logging synchronous
  login local
line aux 0
line 2
  no activation-character
  no exec
  transport preferred none
  transport input all
  transport output pad telnet rlogin lapb-ta mop udptn v120 ssh
  stopbits 1
line vty 0 4
  access-class 23 in
  privilege level 15
  login local
  transport input telnet ssh
line vty 5 15
  access-class 23 in
  privilege level 15
  login local
  transport input telnet ssh
!
scheduler allocate 20000 1000
!
end

```


Initial Configuration of BR1 Router

BR1#**show run**

Building configuration...

Current configuration : 4118 bytes

!

! Last configuration change at 20:33:03 UTC Thu Sep 3 2015 by cisco

version 15.2

service timestamps debug datetime msec

service timestamps log datetime msec

no service password-encryption

!

hostname BR1

!

boot-start-marker

boot-end-marker

!

!

! card type command needed for slot/vwic-slot 0/0

logging buffered 51200 warnings

!

no aaa new-model

!

ip cef

!

!

!

ip dhcp excluded-address 10.10.10.1

!

!

!

no ip domain lookup

ip domain name kwtrain.com

no ipv6 cef

multilink bundle-name authenticated

!

!

!

!

!

!

crypto pki trustpoint TP-self-signed-1996982465

enrollment selfsigned

subject-name cn=IOS-Self-Signed-Certificate-1996982465

revocation-check none

rsakeypair TP-self-signed-1996982465

!

!

crypto pki certificate chain TP-self-signed-1996982465

certificate self-signed 01

3082022B 30820194 A0030201 02020101 300D0609 2A864886 F70D0101 05050030

31312F30 2D060355 04031326 494F532D 53656C66 2D536967 6E65642D 43657274

69666963 6174652D 31393936 39383234 3635301E 170D3133 30363238 30323331

```

35395A17 0D323030 31303130 30303030 305A3031 312F302D 06035504 03132649
4F532D53 656C662D 5369676E 65642D43 65727469 66696361 74652D31 39393639
38323436 3530819F 300D0609 2A864886 F70D0101 01050003 818D0030 81890281
81009EC2 17DFBEF6 DB9E0D6D 06B06014 0E0BFAE3 95FFB6E3 96E4A204 4D6CA7C6
2E83BD2A 62B591D6 7CE5624F 0F8C96AF 8989E38A 2D56460D 0B43F94C 68078642
76650163 495038E1 7844067C 66BDB7E0 2490CE87 C9387A9F EDB39B8C F685703D
E425CC75 285102BA FF29EA27 3F2B2249 73388397 05957F5D 6AB2DD15 6CF609CD
1ACB0203 010001A3 53305130 0F060355 1D130101 FF040530 030101FF 301F0603
551D2304 18301680 14F1E5A1 F95B139B 5876237C 0A10E112 C3F4AF6D 70301D06
03551D0E 04160414 F1E5A1F9 5B139B58 76237C0A 10E112C3 F4AF6D70 300D0609
2A864886 F70D0101 05050003 8181002D 0A22176D 78D7501D C14339E1 89B6ACEC
6DED275E 9314EE28 FD90D95A 2A84CA03 BAF17F7 FCF0FE41 32AA2D16 7820A5BE
5D9872A5 4443184D 892ADF50 78C07ADC 6D4F6AEE 7A969EBE 9ADC78A9 90F86569
8D7B9E90 E7B14315 3F6501A9 C0C2D2F5 9D2C4168 8B708EBB CBDAE81B E33736EA
6286940A FE9680A4 6F6E021E C98E1C
quit
voice-card 0
!
!
!
!
!
!
!
license udi pid CISCO2911/K9 sn FTX1726AL6K
hw-module pvdm 0/0
!
hw-module pvdm 0/1
!
!
!
username cisco secret 4 tnhtc92DXBhelxjYk8LWJrPV36S2i4ntXrpb4RFmfqY
!
redundancy
!
!
!
!
!
!
interface Loopback0
ip address 10.10.32.2 255.255.255.255
!
interface Embedded-Service-Engine0/0
no ip address
shutdown
!
interface GigabitEthernet0/0
description $ETH-LAN$$ETH-SW-LAUNCH$$INTF-INFO-GE 0/0$
no ip address
shutdown
duplex auto
speed auto
!
interface GigabitEthernet0/1
no ip address

```

```

shutdown
duplex auto
speed auto
!
interface GigabitEthernet0/2
no ip address
shutdown
duplex auto
speed auto
!
interface Serial0/1/0
no ip address
encapsulation frame-relay IETF
!
interface Serial0/1/0.1 point-to-point
ip address 10.10.33.2 255.255.255.128
frame-relay interface-dlci 201
!
interface FastEthernet0/2/0
no ip address
!
interface FastEthernet0/2/1
no ip address
!
interface FastEthernet0/2/2
no ip address
!
interface FastEthernet0/2/3
switchport access vlan 500
no ip address
!
interface Vlan1
no ip address
!
interface Vlan400
ip address 10.10.140.1 255.255.255.0
!
interface Vlan500
ip address 10.10.150.1 255.255.255.0
!
router ospf 100
network 0.0.0.0 255.255.255.255 area 0
!
ip forward-protocol nd
!
ip http server
ip http access-class 23
ip http authentication local
ip http secure-server
ip http timeout-policy idle 60 life 86400 requests 10000
!
!
access-list 23 permit 10.10.10.0 0.0.0.7
!
!
!
control-plane

```

```

!
!
!
!
mgcp profile default
!
!
!
!
!
gatekeeper
  shutdown
!
!
!
line con 0
  exec-timeout 0 0
  logging synchronous
  login local
line aux 0
line 2
  no activation-character
  no exec
  transport preferred none
  transport input all
  transport output pad telnet rlogin lapb-ta mop udptn v120 ssh
  stopbits 1
line vty 0 4
  access-class 23 in
  privilege level 15
  login local
  transport input telnet ssh
line vty 5 15
  access-class 23 in
  privilege level 15
  login local
  transport input telnet ssh
!
scheduler allocate 20000 1000
!
end

```

Initial Configuration of BR2 Router

```

BR2#show run
Building configuration...

```

```

Current configuration : 2417 bytes
!
! Last configuration change at 20:54:54 UTC Thu Sep 3 2015
! NVRAM config last updated at 20:55:02 UTC Thu Sep 3 2015
! NVRAM config last updated at 20:55:02 UTC Thu Sep 3 2015
version 15.1
service timestamps debug datetime msec
service timestamps log datetime msec

```

```

no service password-encryption
!
hostname BR2
!
boot-start-marker
boot-end-marker
!
!
! card type command needed for slot/vwic-slot 0/0
!
no aaa new-model
!
!
no ipv6 cef
ip source-route
ip cef
!
!
!
!
!
no ip domain lookup
!
multilink bundle-name authenticated
!
!
!
!
!
crypto pki token default removal timeout 0
!
!
voice-card 0
!
!
!
voice service voip
    fax protocol t38 version 0 ls-redundancy 0 hs-redundancy 0 fallback none
!
!
!
!
!
license udi pid CISCO2921/K9 sn FTX1540AHDV
hw-module pvdm 0/0
!
hw-module sm 1
!
!
!
!
!
redundancy
!
!
!
!
!

```

```

!
!
!
!
!
interface Loopback0
 ip address 10.10.32.3 255.255.255.255
!
interface Embedded-Service-Engine0/0
 no ip address
 shutdown
!
interface GigabitEthernet0/0
 no ip address
 shutdown
 duplex auto
 speed auto
!
interface GigabitEthernet0/1
 no ip address
 shutdown
 duplex auto
 speed auto
!
interface GigabitEthernet0/2
 no ip address
 shutdown
 duplex auto
 speed auto
!
interface Serial0/1/0
 no ip address
 encapsulation frame-relay IETF
!
interface Serial0/1/0.1 point-to-point
 ip address 10.10.33.130 255.255.255.128
 frame-relay interface-dlci 301
!
interface FastEthernet0/2/0
 no ip address
!
interface FastEthernet0/2/1
 no ip address
!
interface FastEthernet0/2/2
 no ip address
!
interface FastEthernet0/2/3
 no ip address
!
interface SM1/0
 no ip address
 shutdown
 !Application: CUE Running on SM
!
interface SM1/1

```

```

no ip address
shutdown
!
interface Vlan1
no ip address
!
!
router ospf 100
network 0.0.0.0 255.255.255.255 area 0
!
ip forward-protocol nd
!
no ip http server
no ip http secure-server
!
!
!
!
!
!
!
!
!
control-plane
!
!
!
!
!
mgcp profile default
!
!
!
!
!
gatekeeper
shutdown
!
!
!
line con 0
exec-timeout 0 0
logging synchronous
line aux 0
line 2
no activation-character
no exec
transport preferred none
transport input all
transport output lat pad telnet rlogin lapb-ta mop udptn v120 ssh
stopbits 1
line 67
no activation-character
no exec
transport preferred none
transport input all
transport output lat pad telnet rlogin lapb-ta mop udptn v120 ssh
stopbits 1
line vty 0 4

```

```
login
transport input all
!
scheduler allocate 20000 1000
end
```

Configuration of PSTN Router/Frame Relay Switch

```
PSTN#show run
Building configuration...
```

```
Current configuration : 9752 bytes
!
! No configuration change since last restart
version 15.2
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname PSTN
!
boot-start-marker
boot-end-marker
!
!
card type t1 0 0
card type e1 0 1
logging buffered 51200 warnings
!
no aaa new-model
network-clock-participate wic 0
network-clock-participate wic 1
no network-clock-participate wic 2
!
ip cef
!
!
!
ip dhcp excluded-address 10.10.10.1
ip dhcp excluded-address 10.10.200.1 10.10.200.9
ip dhcp excluded-address 10.10.200.20 10.10.200.254
ip dhcp excluded-address 10.10.201.1 10.10.201.9
ip dhcp excluded-address 10.10.201.20 10.10.201.254
!
ip dhcp pool PSTN1
 network 10.1.200.0 255.255.255.0
 default-router 10.1.200.229
 option 150 ip 10.1.200.229
!
ip dhcp pool PSTN2
 network 10.1.201.0 255.255.255.0
 default-router 10.1.201.229
 option 150 ip 10.1.200.229
!
!
```



```

!
no ip domain lookup
ip domain name yourdomain.com
no ipv6 cef
multilink bundle-name authenticated
!
frame-relay switching
!
!
!
!
isdn switch-type primary-net5
!
!
crypto pki trustpoint TP-self-signed-2614227737
  enrollment selfsigned
  subject-name cn=IOS-Self-Signed-Certificate-2614227737
  revocation-check none
  rsakeypair TP-self-signed-2614227737
!
!
crypto pki certificate chain TP-self-signed-2614227737
  certificate self-signed 01
    3082022B 30820194 A0030201 02020101 300D0609 2A864886 F70D0101 05050030
    31312F30 2D060355 04031326 494F532D 53656C66 2D536967 6E65642D 43657274
    69666963 6174652D 32363134 32323737 3337301E 170D3133 30363237 31363332
    32375A17 0D323030 31303130 30303030 305A3031 312F302D 06035504 03132649
    4F532D53 656C662D 5369676E 65642D43 65727469 66696361 74652D32 36313432
    32373733 3730819F 300D0609 2A864886 F70D0101 01050003 818D0030 81890281
    8100C0FC CE7D46A0 C00064FF 130DEBB8 39A8C098 6930748B 8F49FEAE 5CBCE56A
    80BEC6AE 1F014CA0 DE315E57 0D6B683A 35623964 A030F40B EC9F3FBB 133E541C
    5A239627 19048F3B EDCB8CE4 918BE484 DAEE449E FB76F7FD 60B89E9A CC752FCB
    D9F6B41F 98D76727 39DB59CF 5AE171E2 A8BB1DF0 10E6319A 9A98D2F2 6D014AC6
    D0E70203 010001A3 53305130 0F060355 1D130101 FF040530 030101FF 301F0603
    551D2304 18301680 141DD495 6B6F3EEB 425A1DFB 822A6DDB 162762D6 A2301D06
    03551D0E 04160414 1DD4956B 6F3EEB42 5A1DFB82 2A6DDB16 2762D6A2 300D0609
    2A864886 F70D0101 05050003 8181000C C61A7D45 ED9A73F8 7B32FDAA 2540DBB8
    9359DEBE F7CB8E9A 75C80BA0 5CC03372 FBE24C0C 1D303EAF 1F34C903 A6584CFC
    18A52377 9846CB10 2EE9810E 596A9FEE D2029703 C8F084FC 118E5BAF 34811E87
    2C1D825D 55D8A0DE ED9A9A23 E60A36A8 0FC03D48 2076D191 FC48C496 94951F6B
    A9ADA15F ABF7A54E 6B1C3D21 BFCFB4
  quit
voice-card 0
!
!
!
voice service voip
  allow-connections h323 to sip
  allow-connections sip to h323
  allow-connections sip to sip
  fax protocol t38 version 0 ls-redundancy 0 hs-redundancy 0 fallback none
  sip
    bind control source-interface gig0/0
    bind media source-interface gig0/0
    registrar server
  !
  !
voice register global

```

```

mode cme
source-address 10.1.200.229 port 5060
bandwidth video tias-modifier 512000 negotiate end-to-end
max-dn 20
max-pool 10
load 9971 sip9971.9-2-2SR1-9.loads
tftp-path flash:
create profile sync 0017344407105603
camera
video
!
voice register dn 1
number 6065555
!
voice register pool 1
id mac 001D.70FC.8BF3
type 9971
number 1 dn 1
dtmf-relay sip-notify
codec g711ulaw
!
!
!
voice translation-rule 1
rule 1 /\(^001\)\(.*\)/ /\2/
rule 2 /\(^1\)\(.*\)/ /\2/
rule 3 /\(^00\)\(.*\)/ /\2/
rule 4 /\(^011\)\(.*\)/ /\2/
!
voice translation-rule 2
rule 1 /^408/ /1&/ type any international
rule 2 /^81\(.*\)/ /\1/ type any subscriber
rule 3 /^4444.*/ /&/ type any subscriber
rule 4 /^859/ /1&/ type any international
!
voice translation-rule 3
rule 1 /^859\(.*\)/ /\1/ type any subscriber
rule 2 /^408/ /&/ type any national
rule 3 /^81/ /&/ type any international
rule 4 /^333/ /&/ type any subscriber
rule 5 /^4444/ /81&/ type any international
!
voice translation-rule 4
rule 1 /^408\(.*\)/ /\1/ type any subscriber
rule 2 /^859/ /&/ type any national
rule 3 /^81/ /&/ type any international
rule 4 /^222/ /\0/ type any subscriber
rule 5 /^4444/ /81&/ type any international
!
!
voice translation-profile BR1
translate calling 3
!
voice translation-profile BR2
translate calling 2
!
voice translation-profile HQ

```

```

    translate calling 4
!
voice translation-profile PSTN
    translate called 1
!
!
!
license udi pid CISCO2911/K9 sn FTX1726AKML
hw-module pvdmm 0/0
!
!
!
username cisco secret 4 tnhtc92DXBhelxjYk8LWJrPV36S2i4ntXrpb4RFmfqY
!
redundancy
!
!
controller T1 0/0/0
    clock source internal
    cablelength long 0db
    pri-group timeslots 1-3,24
!
controller T1 0/0/1
    clock source internal
    cablelength long 0db
    pri-group timeslots 1-3,24
!
controller E1 0/1/0
    clock source internal
    pri-group timeslots 1-10,16
!
!
!
!
!
interface Embedded-Service-Engine0/0
    no ip address
    shutdown
!
interface GigabitEthernet0/0
    description $ETH-LAN$$ETH-SW-LAUNCH$$INTF-INFO-GE 0/0$
    ip address 192.168.1.78 255.255.255.0
    duplex auto
    speed auto
!
interface GigabitEthernet0/1
    ip address 10.1.200.229 255.255.255.0
    duplex auto
    speed auto
!
interface GigabitEthernet0/2
    ip address 10.1.201.229 255.255.255.0
    duplex auto
    speed auto
!
interface Serial0/0/0:23
    no ip address

```

```

encapsulation hdlc
isdn switch-type primary-ni
isdn protocol-emulate network
isdn incoming-voice voice
isdn outgoing display-ie
isdn outgoing ie redirecting-number
no cdp enable
!
interface Serial0/0/1:23
no ip address
encapsulation hdlc
isdn switch-type primary-ni
isdn protocol-emulate network
isdn incoming-voice voice
isdn outgoing display-ie
isdn outgoing ie redirecting-number
no cdp enable
!
interface Serial0/1/0:15
no ip address
encapsulation hdlc
isdn switch-type primary-net5
isdn protocol-emulate network
isdn incoming-voice voice
isdn outgoing display-ie
isdn outgoing ie redirecting-number
no cdp enable
!
interface Serial0/2/0
description FRSW to HQ
no ip address
encapsulation frame-relay IETF
clock rate 8064000
frame-relay lmi-type ansi
frame-relay intf-type dce
frame-relay route 102 interface Serial0/2/1 201
frame-relay route 103 interface Serial0/2/2 301
!
interface Serial0/2/1
no ip address
encapsulation frame-relay IETF
clock rate 8064000
frame-relay lmi-type ansi
frame-relay intf-type dce
frame-relay route 201 interface Serial0/2/0 102
!
interface Serial0/2/2
no ip address
encapsulation frame-relay IETF
clock rate 8064000
frame-relay lmi-type ansi
frame-relay intf-type dce
frame-relay route 301 interface Serial0/2/0 103
!
interface Serial0/2/3
no ip address
shutdown

```

```

    clock rate 2016000
!
ip forward-protocol nd
!
ip http server
ip http access-class 23
ip http authentication local
ip http secure-server
ip http timeout-policy idle 60 life 86400 requests 10000
!
ip route 0.0.0.0 0.0.0.0 192.168.1.1
ip route 10.0.0.0 255.0.0.0 192.168.1.77
!
access-list 23 permit 10.10.10.0 0.0.0.7
!
!
tftp-server flash:dkern9971.100609R2-9-2-2SR1-9.sebn
tftp-server flash:kern9971.9-2-2SR1-9.sebn
tftp-server flash:rootfs9971.9-2-2SR1-9.sebn
tftp-server flash:sboot9971.031610R1-9-2-2SR1-9.sebn
tftp-server flash:sip9971.9-2-2SR1-9.loads
tftp-server flash:skern9971.022809R2-9-2-2SR1-9.sebn
tftp-server flash:term65.default.loads
tftp-server flash:term45.default.loads
tftp-server flash:SCCP45.9-2-1S.loads
tftp-server flash:jar45sccp.9-2-1TH1-13.sbn
tftp-server flash:dsp45.9-2-1TH1-13.sbn
tftp-server flash:cvm45sccp.9-2-1TH1-13.sbn
tftp-server flash:cnu45.9-2-1TH1-13.sbn
tftp-server flash:apps45.9-2-1TH1-13.sbn
!
control-plane
!
!
voice-port 0/0/0:23
    translation-profile incoming PSTN
    translation-profile outgoing HQ
!
voice-port 0/1/0:15
    translation-profile incoming PSTN
    translation-profile outgoing BR2
!
voice-port 0/0/1:23
    translation-profile incoming PSTN
    translation-profile outgoing BR1
!
!
!
!
!
mgcp profile default
!
!
dial-peer voice 11 pots
    description PSTN Phone
    destination-pattern 2222...

```

```

port 0/0/0:23
forward-digits all
!
dial-peer voice 1 pots
incoming called-number .
direct-inward-dial
!
dial-peer voice 10 pots
destination-pattern 4082222...
port 0/0/0:23
forward-digits all
!
dial-peer voice 12 pots
destination-pattern 8144444...
port 0/1/0:15
forward-digits 8
!
dial-peer voice 13 pots
destination-pattern 8593333...
port 0/0/1:23
forward-digits all
!
dial-peer voice 14 pots
destination-pattern 3333...
port 0/0/1:23
forward-digits all
!
dial-peer voice 15 pots
destination-pattern 4444....
port 0/1/0:15
forward-digits all
!
!
!
!
gatekeeper
shutdown
!
!
telephony-service
no auto-reg-ephone
max-ephones 2
max-dn 10 no-reg both
ip source-address 10.1.200.229 port 2000
system message CUCME
load 7965 SCCP45.9-2-1S
time-zone 44
date-format yy-mm-dd
max-conferences 8 gain -6
transfer-system full-consult
secondary-dialtone 9
create cnf-files version-stamp 7960 Jul 13 2015 12:39:52
!
!
ephone-dn 1
number 911 secondary 999 no-reg both
label 911+999

```

```

!
!
ephone-dn 2
  number 4082222020 secondary 2222020 no-reg both
!
!
ephone-dn 3
  number 8593333030 secondary 3333030 no-reg both
!
!
ephone-dn 4
  number 8144444040 secondary 44444040 no-reg both
!
!
ephone 1
  mac-address EC44.761E.B52C
  type 7965
  button 1:1 2:2 3:3 4:4
!
!
!
!
line con 0
  exec-timeout 0 0
  logging synchronous
  login local
line aux 0
line 2
  no activation-character
  no exec
  transport preferred none
  transport input all
  transport output pad telnet rlogin lapb-ta mop udptn v120 ssh
  stopbits 1
line vty 0 4
  access-class 23 in
  privilege level 15
  login local
  transport input telnet ssh
line vty 5 15
  access-class 23 in
  privilege level 15
  login local
  transport input telnet ssh
!
scheduler allocate 20000 1000
ntp server 64.113.32.5
!
end

```

Hardware Inventory

SW1

```
SW1#show inv
NAME: "1", DESCR: "WS-C3750-24P"
PID: WS-C3750-24PS-S , VID: V08 , SN: FDO1408Z0RM
```

HQ

```
HQ#show inv
NAME: "CISCO2911/K9", DESCR: "CISCO2911/K9 chassis, Hw Serial#: FTX1726AL7J,
Hw Revision: 1.0"
PID: CISCO2911/K9 , VID: V07 , SN: FTX1726AL7J

NAME: "VWIC2-1MFT-T1/E1 - 1-Port RJ-48 Multiflex Trunk - T1/E1 on Slot 0
SubSlot 0", DESCR: "VWIC2-1MFT-T1/E1 - 1-Port RJ-48 Multiflex Trunk - T1/E1"
PID: VWIC2-1MFT-T1/E1 , VID: V01 , SN: FOC14283BL9

NAME: "WAN Interface Card - HWIC Serial 1T on Slot 0 SubSlot 1", DESCR: "WAN
Interface Card - HWIC Serial 1T"
PID: HWIC-1T , VID: V05 , SN: FOC18018N2D

NAME: "PVDM3 DSP DIMM with 128 Channels on Slot 0 SubSlot 4", DESCR: "PVDM3
DSP DIMM with 128 Channels"
PID: PVDM3-128 , VID: V01 , SN: FOC1633524N

NAME: "PVDM3 DSP DIMM with 64 Channels on Slot 0 SubSlot 5", DESCR: "PVDM3
DSP DIMM with 64 Channels"
PID: PVDM3-64 , VID: V01 , SN: FOC17405EWP

NAME: "C2911 AC Power Supply", DESCR: "C2911 AC Power Supply"
PID: PWR-2911-AC , VID: V05 , SN: DCA1708R0L1
```

BR1

```
BR1#show inv
NAME: "CISCO2911/K9", DESCR: "CISCO2911/K9 chassis, Hw Serial#: FTX1726AL6K,
Hw Revision: 1.0"
PID: CISCO2911/K9 , VID: V07 , SN: FTX1726AL6K

NAME: "VWIC2-2MFT-T1/E1 - 2-Port RJ-48 Multiflex Trunk - T1/E1 on Slot 0
SubSlot 0", DESCR: "VWIC2-2MFT-T1/E1 - 2-Port RJ-48 Multiflex Trunk - T1/E1"
PID: VWIC2-2MFT-T1/E1 , VID: V01 , SN: FOC11160M6C

NAME: "WAN Interface Card - HWIC Serial 1T on Slot 0 SubSlot 1", DESCR: "WAN
Interface Card - HWIC Serial 1T"
PID: HWIC-1T , VID: V02 , SN: FOC14092KZN

NAME: "4 Port FE Switch on Slot 0 SubSlot 2", DESCR: "4 Port FE Switch"
PID: HWIC-4ESW , VID: VN/A, SN: FOC10150TYW

NAME: "PVDM3 DSP DIMM with 16 Channels on Slot 0 SubSlot 4", DESCR: "PVDM3
DSP DIMM with 16 Channels"
PID: PVDM3-16 , VID: V01 , SN: FOC17235E3M

NAME: "PVDM3 DSP DIMM with 16 Channels on Slot 0 SubSlot 5", DESCR: "PVDM3
DSP DIMM with 16 Channels"
PID: PVDM3-16 , VID: V01 , SN: FOC17244F0V
```


NAME: "C2911 AC Power Supply", DESCR: "C2911 AC Power Supply"
PID: PWR-2911-AC , VID: V05 , SN: DCA1708R0N6

BR2

BR2#**show inv**

NAME: "CISCO2921/K9 chassis", DESCR: "CISCO2921/K9 chassis"
PID: CISCO2921/K9 , VID: V05 , SN: FTX1540AHDV

NAME: "VWIC2-2MFT-T1/E1 - 2-Port RJ-48 Multiflex Trunk - T1/E1 on Slot 0 SubSlot 0", DESCR: "VWIC2-2MFT-T1/E1 - 2-Port RJ-48 Multiflex Trunk - T1/E1"
PID: VWIC2-2MFT-T1/E1 , VID: V01 , SN: FOC11164MVN

NAME: "WAN Interface Card - HWIC Serial 1T on Slot 0 SubSlot 1", DESCR: "WAN Interface Card - HWIC Serial 1T"
PID: HWIC-1T , VID: V04 , SN: FOC15170V4S

NAME: "4 Port FE Switch on Slot 0 SubSlot 2", DESCR: "4 Port FE Switch"
PID: HWIC-4ESW , VID: VN/A, SN: FOC10073BT7

NAME: "PVDM3 DSP DIMM with 32 Channels on Slot 0 SubSlot 4", DESCR: "PVDM3 DSP DIMM with 32 Channels"
PID: PVDM3-32 , VID: V01 , SN: FOC15381A1Z

NAME: "Services Module with Services Ready Engine on Slot 1", DESCR: "Services Module with Services Ready Engine"
PID: SM-SRE-700-K9 , VID: V03 , SN: FOC15334LCJ

NAME: "C2921/C2951 AC Power Supply", DESCR: "C2921/C2951 AC Power Supply"
PID: PWR-2921-51-AC , VID: V02 , SN: DCA1534K0FU

PSTN

PSTN#**show inv**

NAME: "CISCO2911/K9", DESCR: "CISCO2911/K9 chassis, Hw Serial#: FTX1726AKML, Hw Revision: 1.0"
PID: CISCO2911/K9 , VID: V07 , SN: FTX1726AKML

NAME: "VWIC2-2MFT-T1/E1 - 2-Port RJ-48 Multiflex Trunk - T1/E1 on Slot 0 SubSlot 0", DESCR: "VWIC2-2MFT-T1/E1 - 2-Port RJ-48 Multiflex Trunk - T1/E1"
PID: VWIC2-2MFT-T1/E1 , VID: V01 , SN: FOC11160M5K

NAME: "VWIC2-1MFT-T1/E1 - 1-Port RJ-48 Multiflex Trunk - T1/E1 on Slot 0 SubSlot 1", DESCR: "VWIC2-1MFT-T1/E1 - 1-Port RJ-48 Multiflex Trunk - T1/E1"
PID: VWIC2-1MFT-T1/E1 , VID: V01 , SN: FOC110238J8

NAME: "High Speed Wan Interface Card with 4 serial ports(HWIC-4T) on Slot 0 SubSlot 2", DESCR: "High Speed Wan Interface Card with 4 serial ports(HWIC-4T)"
PID: HWIC-4T , VID: V03 , SN: FOC18114QHR

NAME: "PVDM3 DSP DIMM with 16 Channels on Slot 0 SubSlot 4", DESCR: "PVDM3 DSP DIMM with 16 Channels"
PID: PVDM3-16 , VID: V01 , SN: FOC1723400H

NAME: "C2911 AC Power Supply", DESCR: "C2911 AC Power Supply"
PID: PWR-2911-AC , VID: V05 , SN: DCA1708R021