

CSR Configurations

CSR configurations for DRaaS System Enterprise (ENT) to Service Provider (SP) and vPC to vPC configurations follow:

- [Enterprise to Service Provider Configurations, page B-1](#)
 - [ENT-t19-CSR1 Configuration, page B-1](#)
 - [SP-t19-CSR1 Configuration, page B-6](#)
- [vPC to vPC Configurations, page B-10](#)
 - [West-DC xTR Configuration, page B-10](#)
 - [East-DC xTR Configuration, page B-16](#)
 - [PxTR Configuration, page B-21](#)

Enterprise to Service Provider Configurations

The following System Enterprise (ENT) to Service Provider (SP) configurations are provided:

- [ENT-t19-CSR1 Configuration, page B-1](#)
- [SP-t19-CSR1 Configuration, page B-6](#)

ENT-t19-CSR1 Configuration

```

version 15.3
service timestamps debug datetime msec
service timestamps log datetime msec
service internal
no platform punt-keepalive disable-kernel-core
platform console virtual
!
hostname ENT-t19-csr1
!
boot-start-marker
boot-end-marker
!
!
vrf definition Mgmt-intf
!
address-family ipv4
exit-address-family
!

```

```

address-family ipv6
exit-address-family
!
enable secret 4 Ixw342sfeZTFRhrE.x7v0/sfsdfs3423
!
aaa new-model
!
!
aaa group server tacacs+ dc-aaa
server 10.10.10.10
server 10.10.10.11
ip vrf forwarding Mgmt-intf
ip tacacs source-interface GigabitEthernet0
!
aaa authentication login user group dc-aaa local
aaa authorization exec user group dc-aaa local if-authenticated
aaa authorization commands 15 user group dc-aaa local if-authenticated
aaa accounting exec user start-stop group dc-aaa
aaa accounting commands 15 user start-stop group dc-aaa
!
aaa session-id common
!
!
!
no ip domain lookup
ip domain name cisco.com
!
!
otv site bridge-domain 936
!
otv fragmentation join-interface GigabitEthernet1
otv site-identifier 0000.1900.0006
multilink bundle-name authenticated
!
!
license accept end user agreement
license boot level premium
spanning-tree extend system-id
!
username admin privilege 15 password 0 cisco
!
redundancy
mode none
bridge-domain 936
bridge-domain 1921
bridge-domain 1922
bridge-domain 1923
!
!
ip ftp source-interface GigabitEthernet0
ip tftp source-interface GigabitEthernet0
ip ssh rsa keypair-name ssh-key
ip ssh version 2
!
class-map type inspect match-all any-ssh
match protocol ssh
class-map type inspect match-all any-udp
match protocol udp
class-map type inspect match-all any-icmp
match protocol icmp
!
policy-map type inspect outside-to-inside
class type inspect any-icmp
drop

```

```
class type inspect any-ssh
  pass
class type inspect any-udp
  pass
class class-default
  drop log
policy-map type inspect inside-to-outside
  class type inspect any-icmp
  drop
  class type inspect any-ssh
  pass
  class type inspect any-udp
  pass
  class class-default
  drop log
policy-map type inspect inside-to-inside
  class type inspect any-icmp
  drop
  class type inspect any-ssh
  pass
  class type inspect any-udp
  pass
  class class-default
  drop log
!
zone security outside
zone security inside
zone-pair security inside-to-inside source inside destination inside
  service-policy type inspect inside-to-inside
zone-pair security inside-to-outside source inside destination outside
  service-policy type inspect inside-to-outside
zone-pair security outside-to-inside source outside destination inside
  service-policy type inspect outside-to-inside
!
!
crypto isakmp policy 10
  authentication pre-share
crypto isakmp key cisco address 86.86.33.8      255.255.255.0
crypto isakmp keepalive 20 5
!
!
crypto ipsec transform-set myset esp-aes esp-md5-hmac
  mode tunnel
!
!
!
crypto map myvpn 10 ipsec-isakmp
  set peer 86.86.33.8
  set transform-set myset
  match address 186
!
!
!
interface Overlay19
  no ip address
  otv join-interface GigabitEthernet1
  otv use-adjacency-server 86.86.33.8 unicast-only
  service instance 1921 ethernet
    encapsulation dot1q 1921
    bridge-domain 1921
  !
  service instance 1922 ethernet
    encapsulation dot1q 1922
    bridge-domain 1922
```

```

!
service instance 1923 ethernet
  encapsulation dot1q 1923
  bridge-domain 1923
!
!
interface GigabitEthernet1
description CVP6 Gold EP Join Interfacel
ip address 86.68.33.6 255.255.255.0
load-interval 30
negotiation auto
!
interface GigabitEthernet2
description CVP6 Silver 1921 GW
no ip address
load-interval 30
negotiation auto
service instance 936 ethernet
  encapsulation untagged
  bridge-domain 936
!
service instance 1921 ethernet
  encapsulation dot1q 1921
  bridge-domain 1921
!
service instance 1922 ethernet
  encapsulation dot1q 1922
  bridge-domain 1922
!
service instance 1923 ethernet
  encapsulation dot1q 1923
  bridge-domain 1923
!
!
interface GigabitEthernet7
description CVP6 Silver 1921 GW
ip address 86.19.21.1 255.255.255.0
load-interval 30
negotiation auto
!
interface GigabitEthernet8
description CVP6 Silver 1922 GW
ip address 86.19.22.1 255.255.255.0
load-interval 30
negotiation auto
!
interface GigabitEthernet9
description CVP6 Silver 1923 GW
ip address 86.19.23.1 255.255.255.0
load-interval 30
negotiation auto
!
interface GigabitEthernet0
vrf forwarding Mgmt-intf
ip address 10.10.10.109 255.255.255.0
negotiation auto
!
router bgp 65062
  bgp log-neighbor-changes
  network 86.19.21.0 mask 255.255.255.0
  network 86.19.22.0 mask 255.255.255.0
  network 86.19.23.0 mask 255.255.255.0
  neighbor 6.101.100.26 remote-as 109
  neighbor 6.101.100.26 ebgp-multihop 10

```

```
neighbor 6.101.100.26 update-source GigabitEthernet1
neighbor 6.101.100.42 remote-as 109
neighbor 6.101.100.42 ebgp-multihop 10
neighbor 6.101.100.42 update-source GigabitEthernet1
!
!
virtual-service csr_mgmt
  activate
!
ip forward-protocol nd
!
no ip http server
no ip http secure-server
ip route 0.0.0.0 0.0.0.0 GigabitEthernet1 86.68.33.254
ip route 6.101.100.26 255.255.255.255 86.68.33.254
ip route 6.101.100.42 255.255.255.255 86.68.33.254
ip route vrf Mgmt-intf 0.0.0.0 0.0.0.0 GigabitEthernet0 192.168.60.254
ip tacacs source-interface GigabitEthernet0
!
!
access-list 186 permit ip host 86.68.33.6 host 86.86.33.8
!
!
tacacs-server host 10.10.10.10
tacacs-server host 10.10.10.11
tacacs-server key cisco
!
!
control-plane
!
!
line con 0
  login authentication user
  stopbits 1
line aux 0
  stopbits 1
line vty 0 4
  session-timeout 10
  exec-timeout 0 0
  password cisco
  authorization commands 15 user
  authorization exec user
  accounting commands 15 user
  accounting exec user
  login authentication user
  transport input ssh
line vty 5 97
  exec-timeout 30 0
  authorization commands 15 user
  authorization exec user
  accounting commands 15 user
  accounting exec user
  login authentication user
  transport input ssh
!
ntp server vrf Mgmt-intf 10.10.10.79
onep
  transport type tipc
!
end
```

[Return to CSR Configurations, page B-1](#)

SP-t19-CSR1 Configuration

```

version 15.3
service timestamps debug datetime msec
service timestamps log datetime msec localtime
no platform punt-keepalive disable-kernel-core
platform console virtual
!
hostname SP-t19-csr1
!
boot-start-marker
boot-end-marker
!
!
vrf definition Mgmt-intf
!
address-family ipv4
exit-address-family
!
address-family ipv6
exit-address-family
!
enable secret 4 IxbVL4jvd0cadf2345234.4//hF234igZbAI
!
aaa new-model
!
!
aaa group server tacacs+ dc-aaa
server 10.10.10.10
server 10.10.10.11
ip vrf forwarding Mgmt-intf
ip tacacs source-interface GigabitEthernet0
!
aaa authentication login user group dc-aaa local
aaa authorization exec user group dc-aaa local if-authenticated
aaa authorization commands 15 user group dc-aaa local if-authenticated
aaa accounting exec user start-stop group dc-aaa
aaa accounting commands 15 user start-stop group dc-aaa
!
!
aaa session-id common
clock timezone EST -4 0
!
!
!
no ip domain lookup
ip domain name cisco.com
!
!
!
!
!
otv site bridge-domain 936
!
otv fragmentation join-interface GigabitEthernet1
otv site-identifier 0000.1900.0008
multilink bundle-name authenticated
!
!
license accept end user agreement
license boot level premium
spanning-tree extend system-id

```

```
!
username admin privilege 15 secret 4 23aadfsdfwer34//safd43dfZbAI
!
redundancy
  mode none
bridge-domain 936
bridge-domain 1921
bridge-domain 1922
bridge-domain 1923
!
!
!
ip ftp source-interface GigabitEthernet0
ip tftp source-interface GigabitEthernet0
ip ssh rsa keypair-name ssh-key
ip ssh version 2
!
class-map type inspect match-all any-ssh
  match protocol ssh
class-map type inspect match-all any-udp
  match protocol udp
class-map type inspect match-all any-icmp
  match protocol icmp
!
policy-map type inspect outside-to-inside
  class type inspect any-icmp
    drop
  class type inspect any-ssh
    pass
  class type inspect any-udp
    pass
  class class-default
    drop log
policy-map type inspect inside-to-outside
  class type inspect any-icmp
    drop
  class type inspect any-ssh
    pass
  class type inspect any-udp
    pass
  class class-default
    drop log
policy-map type inspect inside-to-inside
  class type inspect any-udp
    pass
  class type inspect any-icmp
    drop
  class type inspect any-ssh
    pass
  class class-default
    drop log
!
zone security outside
zone security inside
zone-pair security inside-to-inside source inside destination inside
  service-policy type inspect inside-to-inside
zone-pair security inside-to-outside source inside destination outside
  service-policy type inspect inside-to-outside
zone-pair security outside-to-inside source outside destination inside
  service-policy type inspect outside-to-inside
!
!
crypto isakmp policy 10
  authentication pre-share
```

```

crypto isakmp key cisco address 86.68.33.6      255.255.255.0
!
!
crypto ipsec transform-set myset esp-aes esp-md5-hmac
mode tunnel
!
!
!
crypto map myvpn 10 ipsec-isakmp
set peer 86.68.33.6
set transform-set myset
match address 186
!
!
!
interface Overlay19
no ip address
otv join-interface GigabitEthernet1
otv adjacency-server unicast-only
service instance 1921 ethernet
encapsulation dot1q 1921
bridge-domain 1921
!
service instance 1922 ethernet
encapsulation dot1q 1922
bridge-domain 1922
!
service instance 1923 ethernet
encapsulation dot1q 1923
bridge-domain 1923
!
!
interface GigabitEthernet1
description CVF6 Gold EP Join Interfacel
ip address 86.86.33.8 255.255.255.0
load-interval 30
negotiation auto
arp timeout 1500
!
interface GigabitEthernet2
description CVF8 Silver 1921 GW
no ip address
load-interval 30
negotiation auto
service instance 936 ethernet
encapsulation untagged
bridge-domain 936
!
service instance 1921 ethernet
encapsulation dot1q 1921
bridge-domain 1921
!
service instance 1922 ethernet
encapsulation dot1q 1922
bridge-domain 1922
!
service instance 1923 ethernet
encapsulation dot1q 1923
bridge-domain 1923
!
!
interface GigabitEthernet9
description CVF8 Silver 1921 GW

```



```
ip address 86.19.21.254 255.255.255.0
load-interval 30
negotiation auto
arp timeout 1500
!
interface GigabitEthernet10
description CVF8 Silver 1922 GW
ip address 86.19.22.254 255.255.255.0
load-interval 30
negotiation auto
arp timeout 1500
!
interface GigabitEthernet11
description CVF8 Silver 1923 GW
ip address 86.19.23.254 255.255.255.0
load-interval 30
negotiation auto
arp timeout 1500
!
interface GigabitEthernet0
vrf forwarding Mgmt-intf
ip address 10.10.10.108 255.255.255.0
negotiation auto
arp timeout 1500
!
router bgp 65082
bgp log-neighbor-changes
network 86.19.21.0 mask 255.255.255.0
network 86.19.22.0 mask 255.255.255.0
network 86.19.23.0 mask 255.255.255.0
neighbor 8.1.19.1 remote-as 109
neighbor 8.1.19.1 ebgp-multihop 10
neighbor 8.1.19.1 update-source GigabitEthernet1
neighbor 8.4.19.1 remote-as 109
neighbor 8.4.19.1 ebgp-multihop 10
neighbor 8.4.19.1 update-source GigabitEthernet1
!
!
virtual-service csr_mgmt
activate
!
ip forward-protocol nd
!
no ip http server
no ip http secure-server
ip route 0.0.0.0 0.0.0.0 GigabitEthernet1 86.86.33.254
ip route 8.1.19.1 255.255.255.255 86.86.33.254
ip route 8.4.19.1 255.255.255.255 86.86.33.254
ip route vrf Mgmt-intf 0.0.0.0 0.0.0.0 GigabitEthernet0 10.10.10.1
ip tacacs source-interface GigabitEthernet0
!
!
access-list 186 permit ip host 86.86.33.8 host 86.68.33.6
!
tacacs-server host 10.10.10.10
tacacs-server host 10.10.10.11
tacacs-server key cisco
!
!
!
control-plane
!
!
line con 0
```

```

login authentication user
stopbits 1
line aux 0
stopbits 1
line vty 0 4
session-timeout 10
exec-timeout 0 0
password cisco
authorization commands 15 user
authorization exec user
accounting commands 15 user
accounting exec user
login authentication user
transport input ssh
line vty 5 97
exec-timeout 30 0
authorization commands 15 user
authorization exec user
accounting commands 15 user
accounting exec user
login authentication user
transport input ssh
!
ntp server vrf Mgmt-intf 10.10.10.79
onep
transport type tipc
!
end

```

Return to [CSR Configurations, page B-1](#)

vPC to vPC Configurations

The following vPC to vPC configurations are provided:

- [West-DC xTR Configuration, page B-10](#)
- [East-DC xTR Configuration, page B-16](#)
- [PxTR Configuration, page B-21](#)

West-DC xTR Configuration

```

service timestamps debug datetime msec
service timestamps log datetime msec
no platform punt-keepalive disable-kernel-core
platform console virtual
!
hostname West-DC
!
boot-start-marker
boot-end-marker
!
!
vrf definition Mgmt-intf
!
address-family ipv4
exit-address-family
!

```

```
address-family ipv6
exit-address-family
!
vrf definition mgmt-netflow-export
!
address-family ipv4
exit-address-family
!
!
enable secret 4 IxbVL4jvd0ceZadf234dfaga.4//hF352igZbAI
!
aaa new-model
!
!
aaa group server tacacs+ dc-aaa
server 10.10.10.10
server 10.10.10.11
ip vrf forwarding Mgmt-intf
ip tacacs source-interface GigabitEthernet0
!
aaa authentication login user group dc-aaa local
aaa authorization exec user group dc-aaa local if-authenticated
aaa authorization commands 15 user group dc-aaa local if-authenticated
aaa accounting exec user start-stop group dc-aaa
aaa accounting commands 15 user start-stop group dc-aaa
!
!
!
!
aaa session-id common
clock timezone EDT -5 0
clock summer-time EDT recurring 1 Sun Mar 2:00 1 Sun Nov 2:00
!

no ip domain lookup
ip domain name cisco.com
!
!
otv site bridge-domain 939
!
otv fragmentation join-interface GigabitEthernet1
otv site-identifier 0000.0000.0001
otv isis Overlay1
lsp-mtu 1350
!
multilink bundle-name authenticated
!
!
license accept end user agreement
license boot level premium
!
mac access-list extended drop-hsrp-mac
deny 0000.0c07.ac00 0000.0000.00ff host 0000.0000.0000
permit host 0000.0000.0000 host 0000.0000.0000
spanning-tree extend system-id
!
username admin privilege 15 secret 4 IxbVL4jvd0ceZasd232ar2/bR1m.4//h354345bAI
!
redundancy
mode none
bridge-domain 939
bridge-domain 2481
```

```

bridge-domain 2482
bridge-domain 2483
!
!
ip tftp source-interface GigabitEthernet0
ip ssh rsa keypair-name ssh-key
ip ssh version 2
!
class-map type inspect match-all any-ssh
  match protocol ssh
class-map type inspect match-all any-udp
  match protocol udp
class-map type inspect match-all any-icmp
  match protocol icmp
!
policy-map type inspect outside-to-inside
  class type inspect any-icmp
    drop
  class type inspect any-ssh
    pass
  class type inspect any-udp
    pass
  class class-default
    drop log
policy-map type inspect lisp-to-inside
  class type inspect any-icmp
    drop
  class type inspect any-ssh
    pass
  class type inspect any-udp
    pass
  class class-default
    drop log
policy-map type inspect inside-to-outside
  class type inspect any-icmp
    drop
  class type inspect any-ssh
    pass
  class type inspect any-udp
    pass
  class class-default
    drop log
policy-map type inspect inside-to-inside
  class type inspect any-icmp
    drop
  class type inspect any-ssh
    pass
  class type inspect any-udp
    pass
  class class-default
    drop log
policy-map type inspect inside-to-lisp
  class type inspect any-icmp
    drop
  class type inspect any-ssh
    pass
  class type inspect any-udp
    pass
  class class-default
    drop log
!
zone security inside
zone security outside
zone security lisp

```

```
zone-pair security inside-to-inside source inside destination inside
  service-policy type inspect inside-to-inside
zone-pair security inside-to-lisp source inside destination lisp
  service-policy type inspect inside-to-lisp
zone-pair security inside-to-outside source inside destination outside
  service-policy type inspect inside-to-outside
zone-pair security lisp-to-inside source lisp destination inside
  service-policy type inspect lisp-to-inside
zone-pair security outside-to-inside source outside destination inside
  service-policy type inspect outside-to-inside
!
!
crypto isakmp policy 10
  authentication pre-share
crypto isakmp key cisco address 8.34.82.10      255.255.255.0
!
!
crypto ipsec transform-set myset esp-aes esp-md5-hmac
  mode tunnel
!
!
!
crypto map myvpn 10 ipsec-isakmp
  set peer 8.34.82.10
  set transform-set myset
  match address 100
!
!
!
!
!
interface LISP0
  description LISP Encap/Decap
  zone-member security lisp
!
interface Overlay1
  mtu 1350
  no ip address
  otv join-interface GigabitEthernet1
  otv use-adjacency-server 8.34.82.10 unicast-only
  service instance 2481 ethernet
    encapsulation dot1q 2481
    mac access-group drop-hsrp-mac out
    bridge-domain 2481
  !
  service instance 2482 ethernet
    encapsulation dot1q 2482
    mac access-group drop-hsrp-mac out
    bridge-domain 2482
  !
!
interface GigabitEthernet1
  description Uplink Layer 3 Interface
  ip address 11.1.5.1 255.255.255.0
  zone-member security outside
  negotiation auto
!
interface GigabitEthernet2
  description VLAN 2481-2483 Layer 2 Interface
  no ip address
  load-interval 30
  negotiation auto
  service instance 939 ethernet
```

```

    encapsulation dot1q 939
    bridge-domain 939
    !
    service instance 2481 ethernet
    encapsulation dot1q 2481
    bridge-domain 2481
    !
    service instance 2482 ethernet
    encapsulation dot1q 2482
    bridge-domain 2482
    !
    !
interface GigabitEthernet3
description VLAN 2481 Layer 3 Interface
ip address 8.24.81.2 255.255.255.0
ip access-group 2000 in
no ip unreachable
zone-member security inside
standby 0 ip 8.24.81.1
load-interval 30
negotiation auto
lisp mobility vlan2481
lisp extended-subnet-mode
arp timeout 1500
!
interface GigabitEthernet4
description VLAN 2482 Layer 3 Interface
ip address 8.24.82.2 255.255.255.0
ip access-group 2000 in
no ip unreachable
zone-member security inside
standby 0 ip 8.24.82.1
load-interval 30
negotiation auto
lisp mobility vlan2482
lisp extended-subnet-mode
arp timeout 1500
!
interface GigabitEthernet0
vrf forwarding Mgmt-intf
ip address 10.10.10.2 255.255.255.0
negotiation auto
!
router lisp
locator-set West-DC
  11.1.5.1 priority 1 weight 100
  exit
!
eid-table default instance-id 0
  database-mapping 8.24.0.0/16 locator-set West-DC
  dynamic-eid vlan2481
    database-mapping 8.24.81.0/24 locator-set West-DC
    exit
  !
  dynamic-eid vlan2482
    database-mapping 8.24.82.0/24 locator-set West-DC
    exit
  !
  exit
!
site EastWestDC
authentication-key cisco
eid-prefix 8.24.0.0/16 accept-more-specifics
exit

```

```
!
ipv4 map-server
ipv4 map-resolver
ipv4 map-request-source 8.34.82.10
ipv4 use-petr 6.126.104.130
ipv4 itr map-resolver 11.1.5.1
ipv4 itr map-resolver 8.34.82.10
ipv4 itr
ipv4 etr map-server 11.1.5.1 key cisco
ipv4 etr map-server 8.34.82.10 key cisco
!
router bgp 65513
  bgp log-neighbor-changes
  neighbor 11.1.5.254 remote-as 109
  !
  address-family ipv4
    network 11.1.5.0 mask 255.255.255.0
    neighbor 11.1.5.254 activate
  exit-address-family
  !
  !
virtual-service csr_mgmt
  activate
  !
ip forward-protocol nd
!
!
no ip http server
no ip http secure-server
ip route vrf Mgmt-intf 0.0.0.0 0.0.0.0 GigabitEthernet0 10.10.10.1
ip tacacs source-interface GigabitEthernet0
!
!
!
!
access-list 100 permit ip host 11.1.5.1 host 8.34.82.10
access-list 2000 deny    udp any eq netbios-ns any eq netbios-ns
access-list 2000 deny    udp any eq netbios-ss any eq netbios-ss
access-list 2000 deny    udp any eq netbios-dgm any eq netbios-dgm
access-list 2000 permit ip any any
!
!
tacacs-server host 10.10.10.10
tacacs-server host 10.10.10.11
tacacs-server key cisco
!
!
!
control-plane
!
!
line con 0
  login authentication cisco
  stopbits 1
line aux 0
  stopbits 1
line vty 0 4
  session-timeout 10
  exec-timeout 0 0
  password cisco
  authorization commands 15 cisco
  authorization exec cisco
  accounting commands 15 cisco
  accounting exec cisco
  login authentication cisco
```

```

transport input ssh
line vty 5 97
  exec-timeout 30 0
  authorization commands 15 cisco
  authorization exec cisco
  accounting commands 15 cisco
  accounting exec cisco
  login authentication cisco
  transport input ssh
!
onep
  transport type tipc
!
end

```

Return to [vPC to vPC Configurations, page B-10](#)

Return to [CSR Configurations, page B-1](#)

East-DC xTR Configuration

```

service timestamps debug datetime msec
service timestamps log datetime msec
no platform punt-keepalive disable-kernel-core
platform console virtual
!
hostname West-DC
!
boot-start-marker
boot-end-marker
!
!
vrf definition Mgmt-intf
!
  address-family ipv4
  exit-address-family
!
  address-family ipv6
  exit-address-family
!
enable secret 4 IxbVL4jvd0ceadf23426/bRlm.4//hF234aZbAI
!
aaa new-model
!
!
aaa group server tacacs+ dc-aaa
  server 10.10.10.10
  server 10.10.10.11
  ip vrf forwarding Mgmt-intf
  ip tacacs source-interface GigabitEthernet0
!
aaa authentication login user group dc-aaa local
aaa authorization exec user group dc-aaa local if-authenticated
aaa authorization commands 15 user group dc-aaa local if-authenticated
aaa accounting exec user start-stop group dc-aaa
aaa accounting commands 15 user start-stop group dc-aaa
!
!
aaa session-id common
clock timezone EDT -5 0
clock summer-time EDT recurring 1 Sun Mar 2:00 1 Sun Nov 2:00
!

```



```
!  
!  
no ip domain lookup  
ip domain name cisco.com  
!  
!  
!  
otv site bridge-domain 939  
!  
otv fragmentation join-interface GigabitEthernet1  
otv site-identifier 0000.0000.0002  
otv isis Overlay1  
    lsp-mtu 1350  
!  
multilink bundle-name authenticated  
!  
!  
license accept end user agreement  
license boot level premium  
!  
mac access-list extended drop-hsrp-mac  
    deny 0000.0c07.ac00 0000.0000.00ff host 0000.0000.0000  
    permit host 0000.0000.0000 host 0000.0000.0000  
spanning-tree extend system-id  
!  
username admin privilege 15 secret 4 IxbVL4jvdadf234zfd4364.4//edF324ZbAI  
!  
redundancy  
    mode none  
bridge-domain 939  
bridge-domain 2481  
bridge-domain 2482  
bridge-domain 2483  
!  
!  
!  
ip tftp source-interface GigabitEthernet1  
ip ssh rsa keypair-name ssh-key  
ip ssh version 2  
!  
class-map type inspect match-all any-ssh  
    match protocol ssh  
class-map type inspect match-all any-udp  
    match protocol udp  
class-map type inspect match-all any-icmp  
    match protocol icmp  
!  
policy-map type inspect outside-to-inside  
    class type inspect any-icmp  
        drop  
    class type inspect any-ssh  
        pass  
    class type inspect any-udp  
        pass  
    class class-default  
        drop log  
policy-map type inspect lisp-to-inside  
    class type inspect any-icmp  
        drop  
    class type inspect any-ssh  
        pass  
    class type inspect any-udp  
        pass  
    class class-default
```

```

    drop log
policy-map type inspect inside-to-outside
  class type inspect any-icmp
    drop
  class type inspect any-ssh
    pass
  class type inspect any-udp
    pass
  class class-default
    drop log
policy-map type inspect inside-to-inside
  class type inspect any-icmp
    drop
  class type inspect any-ssh
    pass
  class type inspect any-udp
    pass
  class class-default
    drop log
policy-map type inspect inside-to-lisp
  class type inspect any-icmp
    drop
  class type inspect any-ssh
    pass
  class type inspect any-udp
    pass
  class class-default
    drop log
!
zone security outside
zone security inside
zone security lisp
zone-pair security inside-to-inside source inside destination inside
  service-policy type inspect inside-to-inside
zone-pair security inside-to-lisp source inside destination lisp
  service-policy type inspect inside-to-lisp
zone-pair security inside-to-outside source inside destination outside
  service-policy type inspect inside-to-outside
zone-pair security lisp-to-inside source lisp destination inside
  service-policy type inspect lisp-to-inside
zone-pair security outside-to-inside source outside destination inside
  service-policy type inspect outside-to-inside
!
!
crypto isakmp policy 10
  authentication pre-share
crypto isakmp key cisco address 11.1.5.1          255.255.255.0
!
!
crypto ipsec transform-set myset esp-aes esp-md5-hmac
mode tunnel
!
!
!
crypto map myvpn 10 ipsec-isakmp
  set peer 11.1.5.1
  set transform-set myset
  match address 100
!
!
!
interface LISPO
description LISP Encap/Decap
zone-member security lisp

```

```
!  
interface Overlay1  
  description CVF8 Gold SP Overlay Interface  
  mtu 1350  
  no ip address  
  otv join-interface GigabitEthernet1  
  otv adjacency-server unicast-only  
  service instance 2481 ethernet  
    encapsulation dot1q 2481  
    mac access-group drop-hsrp-mac out  
    bridge-domain 2481  
  !  
  service instance 2482 ethernet  
    encapsulation dot1q 2482  
    mac access-group drop-hsrp-mac out  
    bridge-domain 2482  
  !  
!  
interface GigabitEthernet1  
  description Uplink Layer 3 Interface  
  ip address 8.34.82.10 255.255.255.0  
  zone-member security outside  
  negotiation auto  
!  
interface GigabitEthernet2  
  description VLAN 2481-2483 Layer 2 Interface  
  no ip address  
  load-interval 30  
  negotiation auto  
  service instance 939 ethernet  
    encapsulation dot1q 939  
    bridge-domain 939  
  !  
  service instance 2481 ethernet  
    encapsulation dot1q 2481  
    bridge-domain 2481  
  !  
  service instance 2482 ethernet  
    encapsulation dot1q 2482  
    bridge-domain 2482  
  !  
!  
interface GigabitEthernet3  
  description VLAN 2481 Layer 3 Interface  
  ip address 8.24.81.3 255.255.255.0  
  ip access-group 2000 in  
  no ip unreachable  
  zone-member security inside  
  standby 0 ip 8.24.81.1  
  load-interval 30  
  negotiation auto  
  lisp mobility vlan2481  
  lisp extended-subnet-mode  
  arp timeout 1500  
!  
interface GigabitEthernet4  
  description VLAN 2482 Layer 3 Interface  
  ip address 8.24.82.3 255.255.255.0  
  ip access-group 2000 in  
  no ip unreachable  
  zone-member security inside  
  standby 0 ip 8.24.82.1  
  load-interval 30  
  negotiation auto
```

```

lisp mobility vlan2482
lisp extended-subnet-mode
arp timeout 1500
!
interface GigabitEthernet0
vrf forwarding Mgmt-intf
ip address 10.10.10.3 255.255.255.0
negotiation auto
!
router lisp
locator-set East-DC
 8.34.82.10 priority 1 weight 100
exit
!
eid-table default instance-id 0
database-mapping 8.24.0.0/16 locator-set East-DC
dynamic-eid vlan2481
  database-mapping 8.24.81.0/24 locator-set East-DC
  exit
!
dynamic-eid vlan2482
  database-mapping 8.24.82.0/24 locator-set East-DC
  exit
!
exit
!
site EastWestDC
authentication-key cisco
eid-prefix 8.24.0.0/16 accept-more-specifics
exit
!
ipv4 map-server
ipv4 map-resolver
ipv4 map-request-source 8.34.82.10
ipv4 use-petr 6.126.104.130
ipv4 itr map-resolver 11.1.5.1
ipv4 itr map-resolver 8.34.82.10
ipv4 itr
ipv4 etr map-server 11.1.5.1 key cisco
ipv4 etr map-server 8.34.82.10 key cisco
ipv4 etr
!
router bgp 65508
bgp log-neighbor-changes
neighbor 8.1.9.1 remote-as 109
neighbor 8.1.9.1 ebgp-multihop 10
neighbor 8.1.9.1 update-source GigabitEthernet1
neighbor 8.4.9.1 remote-as 109
neighbor 8.4.9.1 ebgp-multihop 10
neighbor 8.4.9.1 update-source GigabitEthernet1
!
address-family ipv4
neighbor 8.1.9.1 activate
neighbor 8.4.9.1 activate
exit-address-family
!
!
virtual-service csr_mgmt
activate
!
ip forward-protocol nd
!
no ip http server
no ip http secure-server

```

```

ip route 8.1.9.1 255.255.255.255 8.34.82.1
ip route 8.4.9.1 255.255.255.255 8.34.82.1
ip route vrf Mgmt-intf 0.0.0.0 0.0.0.0 GigabitEthernet0 10.10.10.1
!
!
access-list 100 permit ip host 8.34.82.10 host 11.1.5.1
access-list 2000 deny    udp any eq netbios-ns any eq netbios-ns
access-list 2000 deny    udp any eq netbios-ss any eq netbios-ss
access-list 2000 deny    udp any eq netbios-dgm any eq netbios-dgm
access-list 2000 permit ip any any
!
!
!
control-plane
!
!
line con 0
  login authentication cisco
  stopbits 1
line aux 0
  stopbits 1
line vty 0 4
  session-timeout 10
  exec-timeout 0 0
  password cisco
  authorization commands 15 cisco
  authorization exec cisco
  accounting commands 15 cisco
  accounting exec cisco
  login authentication cisco
  transport input ssh
line vty 5 97
  exec-timeout 30 0
  authorization commands 15 cisco
  authorization exec cisco
  accounting commands 15 cisco
  accounting exec cisco
  login authentication cisco
  transport input ssh
!
!
onep
  transport type tipc
!
end

```

Return to [vPC to vPC Configurations, page B-10](#)

Return to [CSR Configurations, page B-1](#)

PxTR Configuration

```

service timestamps debug datetime msec
service timestamps log datetime msec
no platform punt-keepalive disable-kernel-core
platform console virtual
!
hostname pxtr
!
boot-start-marker
boot-end-marker
!
!

```

```

vrf definition Mgmt-intf
!
address-family ipv4
exit-address-family
!
address-family ipv6
exit-address-family
!
enable secret 4 IxbVL4jvd0ceZTFRhrE.x7vO/bRlm.4//hTrzigZbAI
!
aaa new-model
!
!
aaa group server tacacs+ dc-aaa
server 10.10.10.10
server 10.10.10.11
ip vrf forwarding Mgmt-intf
ip tacacs source-interface GigabitEthernet0
!
aaa authentication login user group dc-aaa local
aaa authorization exec user group dc-aaa local if-authenticated
aaa authorization commands 15 user group dc-aaa local if-authenticated
aaa accounting exec user start-stop group dc-aaa
aaa accounting commands 15 user start-stop group dc-aaa
!
!
!
aaa session-id common
!
!
!
no ip domain lookup
ip domain name cisco.com
!
!
multilink bundle-name authenticated
!
!
license accept end user agreement
license boot level premium
spanning-tree extend system-id
!
username admin privilege 15 secret 4 IxbVL4jvd0ceZTFRhrE.x7vO/bRlm.4//hTrzigZbAI
!
redundancy
mode none
!
!
!
!
ip tftp source-interface GigabitEthernet0
ip ssh rsa keypair-name ssh-key
ip ssh version 2
!
class-map type inspect match-all any-ssh
match protocol ssh
class-map type inspect match-all any-udp
match protocol udp
class-map type inspect match-all any-icmp
match protocol icmp
!
policy-map type inspect outside-to-inside
class type inspect any-icmp
drop

```

```

class type inspect any-ssh
  pass
class type inspect any-udp
  pass
class class-default
  drop log
policy-map type inspect lisp-to-inside
  class type inspect any-icmp
  drop
class type inspect any-ssh
  pass
class type inspect any-udp
  pass
class class-default
  drop log
policy-map type inspect inside-to-outside
class type inspect any-icmp
  drop
class type inspect any-ssh
  pass
class type inspect any-udp
  pass
class class-default
  drop log
policy-map type inspect inside-to-lisp
class type inspect any-icmp
  drop
class type inspect any-ssh
  pass
class type inspect any-udp
  pass
class class-default
  drop log
!
zone security outside
zone security inside
zone security lisp
zone-pair security inside-to-lisp source inside destination lisp
  service-policy type inspect inside-to-lisp
zone-pair security inside-to-outside source inside destination outside
  service-policy type inspect inside-to-outside
zone-pair security lisp-to-inside source lisp destination inside
  service-policy type inspect lisp-to-inside
zone-pair security outside-to-inside source outside destination inside
  service-policy type inspect outside-to-inside
!
!
!
!
!
interface LISP0
  zone-member security lisp
!
interface GigabitEthernet1
  description Uplink Layer 3 Interface
  ip address 6.126.104.130 255.255.255.192
  zone-member security outside
  load-interval 30
  negotiation auto
!
interface GigabitEthernet2
  description NON-LISP Subnet
  ip address 3.3.3.1 255.255.255.0
  zone-member security inside

```

```

load-interval 30
negotiation auto
!
interface GigabitEthernet0
vrf forwarding Mgmt-intf
ip address 10.10.10.4 255.255.255.0
negotiation auto
!
router lisp
eid-table default instance-id 0
map-cache 8.24.0.0/16 map-request
exit
!
ipv4 map-request-source 6.126.104.130
ipv4 map-cache-limit 100000
ipv4 proxy-etr
ipv4 proxy-itr 6.126.104.130
ipv4 itr map-resolver 11.1.5.1
ipv4 itr map-resolver 8.34.82.10
exit
!
router bgp 65506
bgp log-neighbor-changes
neighbor 6.101.98.18 remote-as 109
neighbor 6.101.98.18 ebgp-multihop 10
neighbor 6.101.98.18 update-source GigabitEthernet1
neighbor 6.101.98.34 remote-as 109
neighbor 6.101.98.34 ebgp-multihop 10
neighbor 6.101.98.34 update-source GigabitEthernet1
!
address-family ipv4
neighbor 6.101.98.18 activate
neighbor 6.101.98.34 activate
exit-address-family
!
!
virtual-service csr_mgmt
activate
!
ip forward-protocol nd
!
no ip http server
no ip http secure-server
ip route 0.0.0.0 0.0.0.0 6.126.104.135
ip route 6.101.98.18 255.255.255.255 6.126.104.135
ip route 6.101.98.34 255.255.255.255 6.126.104.135
ip route vrf Mgmt-intf 0.0.0.0 0.0.0.0 GigabitEthernet0 10.10.10.1
!
!
control-plane
!
!
line con 0
login authentication cisco
stopbits 1
line aux 0
stopbits 1
line vty 0 4
session-timeout 10
exec-timeout 0 0
password cisco
authorization commands 15 cisco
authorization exec cisco
accounting commands 15 cisco

```



```
accounting exec cisco
login authentication cisco
transport input ssh
line vty 5 97
exec-timeout 30 0
authorization commands 15 cisco
authorization exec cisco
accounting commands 15 cisco
accounting exec cisco
login authentication cisco
transport input ssh
!
onep
transport type tipc
!
end
```

[Return to vPC to vPC Configurations, page B-10](#)

[Return to CSR Configurations, page B-1](#)

