

show running-config

```
Current configuration : 2781 bytes
version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
service password-encryption
hostname R2-4_ISPC-B3
boot-start-marker
boot-end-marker
enable secret 5 $1$n8M1$UQ7NyyCy4vtqfzzseFwtK1
no aaa new-model
no network-clock-participate slot 1
no network-clock-participate wic 0
ip cef
no ip domain lookup
ip auth-proxy max-nodata-conns 3
ip admission max-nodata-conns 3
ipv6 unicast-routing
username cisco privilege 15 secret 5 $1$NyFD$ypHLwGgQAuHcVDqvLitbR/
interface Loopback0
ip address 28.1.1.1 255.255.255.0
ipv6 address 2001:28::1/64
ipv6 enable
ipv6 ospf 10 area 1
interface FastEthernet0/0
ip address 190.20.0.254 255.255.255.0
shutdown
duplex auto
speed auto
interface Serial0/0
no ip address
shutdown
no fair-queue
interface BRI0/0
no ip address
encapsulation hdlc
shutdown
interface FastEthernet0/1
ip address 10.78.0.10 255.255.255.0
duplex auto
speed auto
interface Serial0/1
description to_R2-3_ISPC
no ip address
encapsulation frame-relay
shutdown
no keepalive
interface Serial0/1.301 point-to-point
description to_R2_9_ISPC-B2
ip address 10.30.0.10 255.255.255.252
ipv6 address 2001:3::2/64
ipv6 enable
ipv6 chable
ipv6 ospf 10 area 1
frame-relay interface-dlci 301
router ospf 1
log-adjacency-changes
```



```
network 10.30.0.8 0.0.0.3 area 1
network 28.1.1.0 0.0.0.255 area 1
router bgp 300
bgp router-id 28.1.1.1
no bgp default ipv4-unicast
bgp log-neighbor-changes
neighbor 2.2.2.2 remote-as 2
neighbor 2.2.2.2 local-as 301 no-prepend replace-as dual-as
neighbor 2.2.2.2 ebgp-multihop 255
neighbor 2.2.2.2 update-source Loopback0
neighbor 9.1.1.1 remote-as 301
neighbor 9.1.1.1 local-as 301 no-prepend replace-as dual-as
neighbor 9.1.1.1 ebgp-multihop 255
neighbor 9.1.1.1 update-source Loopback0
neighbor 2001:9::1 remote-as 300
neighbor 2001:9::1 update-source Loopback0
address-family ipv4 neighbor 2.2.2.2 activate
neighbor 2.2.2.2 next-hop-self
neighbor 9.1.1.1 activate
neighbor 9.1.1.1 next-hop-self
no auto-summary
no synchronization
network 190.20.0.0 mask 255.255.255.0
exit-address-family
address-family ipv6 neighbor 2001:9::1 activate
neighbor 2001:9::1 next-hop-self
no synchronization
exit-address-family
ip forward-protocol nd
ip route 2.2.2.0 255.255.255.0 190.20.0.1
ip http server
no ip http secure-server
ipv6 router ospf 10
router-id 28.1.1.1
log-adjacency-changes
control-plane
banner motd ^CCCNot Authorized!^C
line con 0
exec-timeout 0 0
logging synchronous
login local
line aux 0
line vty 0 4
exec-timeout 0 0
logging synchronous
login local
line vty 5 15
exec-timeout 0 0
logging synchronous
login local
end
```



show ip route

```
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2
i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
ia - IS-IS inter area, * - candidate default, U - per-user static route
O - ODR, P - periodic downloaded static route

Gateway of last resort is not set

28.0.0.0/24 is subnetted, 1 subnets
C 28.1.1.0 is directly connected, Loopback0
```



show ipv6 route

```
IPv6 Routing Table - 4 entries
Codes: C - Connected, L - Local, S - Static, R - RIP, B - BGP
U - Per-user Static route
I1 - ISIS L1, I2 - ISIS L2, IA - ISIS interarea, IS - ISIS summary
O - OSPF intra, OI - OSPF inter, OE1 - OSPF ext 1, OE2 - OSPF ext 2
ON1 - OSPF NSSA ext 1, ON2 - OSPF NSSA ext 2
C 2001:28::/64 [0/0]
via ::, Loopback0
L 2001:28::1/128 [0/0]
via ::, Loopback0
L FE80::/10 [0/0]
via ::, Null0
L FF00::/8 [0/0]
via ::, Null0
```



show ip int brief

Interface IP-Address OK? Method Status Protocol FastEthernet0/0 190.20.0.254 YES manual administratively down down Serial0/0 unassigned YES manual administratively down down BRI0/0 unassigned YES manual administratively down down BRI0/0:1 unassigned YES unset administratively down down BRI0/0:2 unassigned YES unset administratively down down BRI0/0:2 unassigned YES unset administratively down down FastEthernet0/1 10.78.0.10 YES manual administratively down down Serial0/1 unassigned YES manual administratively down down Serial0/1.301 10.30.0.10 YES manual administratively down down Loopback0 28.1.1.1 YES manual up up



show ipv6 int brief

FastEthernet0/0 [administratively down/down]
Serial0/0 [administratively down/down]
BRI0/0:1 [administratively down/down]
BRI0/0:1 [administratively down/down]
BRI0/0:2 [administratively down/down]
FastEthernet0/1 [administratively down/down]
Serial0/1 [administratively down/down]
Serial0/1.301 [administratively down/down]
FE80::20A:F4FF:FE34:DCC0
2001:3::2
Loopback0 [up/up]
FE80::20A:F4FF:FE34:DCC0
2001:28::1



show cdp neighbors

Capability Codes: R - Router, T - Trans Bridge, B - Source Route Bridge S - Switch, H - Host, I - IGMP, r - Repeater

Device ID Local Intrfce Holdtme Capability Platform Port ID



show ipv6 ospf 10

Routing Process "ospfv3 10" with ID 28.1.1.1

SPF schedule delay 5 secs, Hold time between two SPFs 10 secs
Minimum LSA interval 5 secs. Minimum LSA arrival 1 secs
LSA group pacing timer 240 secs
Interface flood pacing timer 33 msecs
Retransmission pacing timer 66 msecs
Number of external LSA 0. Checksum Sum 0x000000

Number of areas in this router is 1. 1 normal 0 stub 0 nssa
Reference bandwidth unit is 100 mbps
Area 1

Number of interfaces in this area is 2

SPF algorithm executed 1 times
Number of LSA 2. Checksum Sum 0x00F2E8

Number of DCbitless LSA 0

Number of indication LSA 0

Number of DONotAge LSA 0

Flood list length 0



show ipv6 ospf 10 neighbor



show ip bgp summary

BGP router identifier 28.1.1.1, local AS number 300 BGP table version is 1, main routing table version 1

Neighbor V AS MsgRcvd MsgSent TblVer InQ OutQ Up/Down State/PfxRcd 2.2.2.2 4 2 0 0 0 0 never Active 9.1.1.1 4 301 0 0 0 0 never Active



show version

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