

### show running-config

```
Current configuration : 2240 bytes
version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
service password-encryption
hostname R2-8_ISPC-B1
boot-start-marker
boot-end-marker
enable secret 5 $1$r52E$7ecQhrrJAaXMwvYqmKDiH.
no aaa new-model
resource policy
ip cef
no ip domain lookup
ipv6 unicast-routing
username cisco privilege 15 secret 5 $1$kaZ.$PCxvEIYJOkIidJ4DloKhU/
interface Loopback0
ip address 8.1.1.1 255.255.255.0
ipv6 address 2001:8::1/64
ipv6 enable
ipv6 ospf 10 area 1
interface FastEthernet0/0
ip address 190.30.0.1 255.255.255.0
duplex auto
speed auto
interface FastEthernet0/1
no ip address
shutdown
duplex auto
speed auto
interface Serial0/1/0
no ip address
encapsulation frame-relay
no keepalive
no fair-queue
clock rate 2000000
interface Serial0/1/0.102 point-to-point
description to R2-2_ISPC
ip address 10.30.0.2 255.255.252
ip access-group s010_IN in
ipv6 address 2001:1::2/64
ipv6 enable
ipv6 ospf 10 area 1
frame-relay interface-dlci 102
interface Serial0/1/1
no ip address
shutdown
clock rate 2000000
router ospf 1
log-adjacency-changes
redistribute static subnets
network 8.1.1.0 0.0.0.255 area 1
network 10.30.0.0 0.0.0.3 area 1
default-information originate
```



```
router bgp 300
no synchronization
bgp log-neighbor-changes
network 190.30.0.0 mask 255.255.255.0
neighbor 9.1.1.1 remote-as 300
neighbor 9.1.1.1 update-source Loopback0
neighbor 9.1.1.1 next-hop-self
no auto-summary
ip route 200.1.0.0 255.255.255.0 190.30.0.254
ip route 200.2.0.0 255.255.255.0 190.30.0.254
ip route 200.3.0.0 255.255.255.0 190.30.0.254
ip http server
no ip http secure-server
ipv6 router ospf 10
router-id 8.1.1.1
log-adjacency-changes
control-plane
banner motd ^CNot Authorized!^C
line con 0
exec-timeout 0 0
password 7 060506324F41
logging synchronous
login local
line aux 0
line vty 0 4
exec-timeout 0 0
password 7 094F471A1A0A
logging synchronous
login local
transport input telnet
line vty 5 15
exec-timeout 0 0
password 7 094F471A1A0A
logging synchronous
login local
transport input telnet
scheduler allocate 20000 1000
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 180.30.0.254 to network 0.0.0.0
S 200.1.0.0/24 [1/0] via 190.30.0.254
S 200.2.0.0/24 [1/0] via 190.30.0.254
S 200.3.0.0/24 [1/0] via 190.30.0.254
190.20.0.0/24 is subnetted, 1 subnets
B 190.20.0.0 [200/0] via 28.1.1.1, 20:17:18
190.30.0.0/24 is subnetted, 1 subnets
C 190.30.0.0 is directly connected, FastEthernet0/0
23.0.0.0/32 is subnetted, 1 subnets
O 23.1.1.1 [110/129] via 10.30.0.1, 20:17:40, Serial0/1/0.102
22.0.0.0/32 is subnetted, 1 subnets
0 22.1.1.1 [110/129] via 10.30.0.1, 20:17:40, Serial0/1/0.102
8.0.0.0/24 is subnetted, 1 subnets
C 8.1.1.0 is directly connected, Loopback0
9.0.0.0/32 is subnetted, 1 subnets
0 9.1.1.1 [110/65] via 10.30.0.1, 20:17:40, Serial0/1/0.102
10.0.0.0/30 is subnetted, 4 subnets
0 10.30.0.4 [110/128] via 10.30.0.1, 20:17:40, Serial0/1/0.102
C 10.30.0.0 is directly connected, Serial0/1/0.102 \,
0 10.30.0.12 [110/128] via 10.30.0.1, 20:17:40, Serial0/1/0.102
O 10.30.0.8 [110/128] via 10.30.0.1, 20:17:40, Serial0/1/0.102
28.0.0.0/32 is subnetted, 1 subnets
O 28.1.1.1 [110/129] via 10.30.0.1, 20:17:40, Serial0/1/0.102
180.30.0.0/24 is subnetted, 1 subnets
B 180.30.0.0 [200/0] via 9.1.1.1, 20:17:18
B* 0.0.0.0/0 [200/0] via 180.30.0.254, 20:16:53
```



# show ipv6 route

```
IPv6 Routing Table - 13 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
D - EIGRP, EX - EIGRP external C 2001:1::/64 [0/0]
via ::, Serial0/1/0.102
L 2001:1::2/128 [0/0]
via ::, Serial0/1/0.102
0 2001:2::/64 [110/128]
via FE80::21A:E2FF:FEAB:49DE, Serial0/1/0.102
0 2001:3::/64 [110/128]
via FE80::21A:E2FF:FEAB:49DE, Serial0/1/0.102
0 2001:4::/64 [110/128]
via FE80::21A:E2FF:FEAB:49DE, Serial0/1/0.102
C 2001:8::/64 [0/0]
via ::, Loopback0
L 2001:8::1/128 [0/0]
via ::, Loopback0
O 2001:9::1/128 [110/64]
via FE80::21A:E2FF:FEAB:49DE, Serial0/1/0.102
0 2001:22::1/128 [110/128]
via FE80::21A:E2FF:FEAB:49DE, Serial0/1/0.102
0 2001:23::1/128 [110/128]
via FE80::21A:E2FF:FEAB:49DE, Serial0/1/0.102
0 2001:28::1/128 [110/128]
via FE80::21A:E2FF:FEAB:49DE, Serial0/1/0.102
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 FastEthernet0/0 190.30.0.1 YES manual up up FastEthernet0/1 unassigned YES unset administratively down down Serial0/1/0 unassigned YES unset up up Serial0/1/0.102 10.30.0.2 YES manual up up Serial0/1/1 unassigned YES unset administratively down down Loopback0 8.1.1.1 YES manual up up



# show ipv6 int brief

FastEthernet0/0 [up/up]
unassigned
FastEthernet0/1 [administratively down/down]
unassigned
Serial0/1/0 [up/up]
unassigned
Serial0/1/0.102 [up/up]
FE80::21A:E2FF:FEAB:4B32
2001:1::2
Serial0/1/1 [administratively down/down]
unassigned
Loopback0 [up/up]
FE80::21A:E2FF:FEAB:4B32
2001:8::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 R3-23\_ISP\_A-B3.cisco.com
Fas 0/0 131 R S I CISCO2911 Gig 0/0
R2-9\_ISPC-B2 Ser 0/1/0.102 173 R S I 2801 Ser 0/1/0.100



## show ipv6 ospf 10

Routing Process "ospfv3 10" with ID 8.1.1.1

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 8 times
Number of LSA 12. Checksum Sum 0x062F21

Number of DCbitless LSA 0

Number of indication LSA 0

Number of DONotAge LSA 0
Flood list length 0



# show ipv6 ospf 10 neighbor

Neighbor ID Pri State Dead Time Interface ID Interface 1.1.1.1 1 FULL/ - 00:00:37 15 Serial0/1/0.102



# show ip bgp summary

BGP router identifier 8.1.1.1, local AS number 300
BGP table version is 15, main routing table version 15
4 network entries using 516 bytes of memory
4 path entries using 208 bytes of memory
4/3 BGP path/bestpath attribute entries using 496 bytes of memory
1 BGP rrinfo entries using 24 bytes of memory
1 BGP AS-PATH entries using 24 bytes of memory
0 BGP route-map cache entries using 0 bytes of memory
0 BGP filter-list cache entries using 0 bytes of memory
BGP using 1268 total bytes of memory
BGP activity 7/3 prefixes, 7/3 paths, scan interval 60 secs

Neighbor V AS MsgRcvd MsgSent TblVer InQ OutQ Up/Down State/PfxRcd 9.1.1.1 4 300 1275 1270 15 0 0 21:04:55 3



#### show version

Cisco IOS Software, 2801 Software (C2801-ADVENTERPRISEK9-M), Version 12.4(9)T3, RELEASE SOFTWARE (fc3)
Technical Support: http://www.cisco.com/techsupport

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ROM: System Bootstrap, Version 12.3(8r)T9, RELEASE SOFTWARE (fc1)

R2-8\_ISPC-B1 uptime is 21 hours, 13 minutes

System returned to ROM by reload at 19:07:27 UTC Thu May 28 2015 System image file is "flash:c2801-adventerprisek9-mz.124-9.T3.bin"

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If you require further assistance please contact us by sending email to export@cisco.com.

Cisco 2801 (revision 6.0) with 119808K/11264K bytes of memory. Processor board ID FCZ110812PZ 2 FastEthernet interfaces 2 Serial(sync/async) interfaces 1 Virtual Private Network (VPN) Module DRAM configuration is 64 bits wide with parity disabled. 191K bytes of NVRAM.

Configuration register is 0x2102

62720K bytes of ATA CompactFlash (Read/Write)