

## show running-config

```
Current configuration : 2298 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

no logging buffered
no logging console
no logging monitor
enable secret 5 $1$r52E$7ecQhrrJAaXMwvYqmKDiH.

no aaa new-model

resource policy

ip cef

no ip domain lookup
ipv6 unicast-routing

voice-card 0

username cisco privilege 15 secret 5 $1$kaZ.$PCxvEIYJOkIidJ4Dl0KhU/

!

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 10.30.0.2 255.255.255.252
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, 21:24:50
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, 21:25:11, Serial0/1/0.102
22.0.0.0/32 is subnetted, 1 subnets
O 22.1.1.1 [110/129] via 10.30.0.1, 21:25:11, 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
O 9.1.1.1 [110/65] via 10.30.0.1, 21:25:11, Serial0/1/0.102
10.0.0.0/30 is subnetted, 4 subnets
O 10.30.0.4 [110/128] via 10.30.0.1, 21:25:11, Serial0/1/0.102
C 10.30.0.0 is directly connected, Serial0/1/0.102
O 10.30.0.12 [110/128] via 10.30.0.1, 21:25:11, Serial0/1/0.102
O 10.30.0.8 [110/128] via 10.30.0.1, 21:25:11, 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, 21:25:11, 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, 21:24:50
B* 0.0.0.0/0 [200/0] via 180.30.0.254, 21:24:25
```

## 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
O 2001:2::/64 [110/128]
via FE80::21A:E2FF:FEAB:49DE, Serial0/1/0.102
O 2001:3::/64 [110/128]
via FE80::21A:E2FF:FEAB:49DE, Serial0/1/0.102
O 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
O 2001:22::1/128 [110/128]
via FE80::21A:E2FF:FEAB:49DE, Serial0/1/0.102
O 2001:23::1/128 [110/128]
via FE80::21A:E2FF:FEAB:49DE, Serial0/1/0.102
O 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 0/0 166 R S I CISCO2911 Gig 0/0
R2-9_ISPC-B2 Ser 0/1/0.102 142 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 msec
Retransmission pacing timer 66 msec
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 0x05FF39
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/	-	00:00:35	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 1343 1338 15 0 0 22:12:27 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 22 hours, 21 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"

This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at: <http://www.cisco.com/wwl/export/crypto/tool/stqrg.html>

If you require further assistance please contact us by sending email to [export@cisco.com](mailto: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.

62720K bytes of ATA CompactFlash (Read/Write)

Configuration register is 0x2102