

show running-config

```
Current configuration : 3351 bytes
version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
service password-encryption
hostname R2-9_ISPC-B2
boot-start-marker
boot-end-marker
no logging buffered
no logging console
no logging monitor
enable secret 5 $1$3ABQ$y.oB57tM6sF9PFFV0A8Zp1
no aaa new-model
resource policy
ip cef
no ip domain lookup
ipv6 unicast-routing
voice-card 0
username cisco privilege 15 secret 5 $1$tJ17$DCCqS4rnFDuTV1GcD79WG/
interface Loopback0
ip address 9.1.1.1 255.255.255.0
ipv6 address 2001:9::1/64 ipv6 enable
ipv6 ospf 10 area 1
interface FastEthernet0/0
ip address 180.30.0.1 255.255.255.0
duplex auto
speed auto
interface FastEthernet0/1
no ip address
shutdown
duplex auto
speed auto
interface Serial0/1/0
description to_R2_3
no ip address
encapsulation frame-relay
no keepalive
no fair-queue
interface Serial0/1/0.100 point-to-point
description to_R2_8_ISPC-B1
ip address 10.30.0.1 255.255.255.252
ipv6 address 2001:1::1/64
ipv6 enable
ipv6 ospf 10 area 1
frame-relay interface-dlci 100
interface Serial0/1/0.200 point-to-point
description to_R2_22_ISPC-B5
ip address 10.30.0.5 255.255.255.252
ipv6 address 2001:2::1/64
ipv6 enable
ipv6 ospf 10 area 1
frame-relay interface-dlci 200
interface Serial0/1/0.300 point-to-point
description to_R2_28_ISPC-B2
```



```
ip address 10.30.0.9 255.255.255.252
ipv6 address 2001:3::1/64
ipv6 enable
ipv6 ospf 10 area 1
frame-relay interface-dlci 300
interface Serial0/1/0.400 point-to-point
description to_R2_23_ISPC-B2
ip address 10.30.0.13 255.255.255.252
ipv6 address 2001:4::1/64
ipv6 enable
ipv6 ospf 10 area 1
frame-relay interface-dlci 400
interface Serial0/1/1
no ip address
shutdown
clock rate 2000000
router ospf 1
router-id 30.1.1.1
log-adjacency-changes
network 9.1.1.1 0.0.0.0 area 1
network 10.30.0.0 0.0.0.3 area 1
network 10.30.0.4 0.0.0.3 area 1
network 10.30.0.8 0.0.0.3 area 1
network 10.30.0.12 0.0.0.3 area 1
router bgp 300
no synchronization
bgp log-neighbor-changes
network 180.30.0.0 mask 255.255.255.0
neighbor 8.1.1.1 remote-as 300
neighbor 8.1.1.1 update-source Loopback0
neighbor 8.1.1.1 route-reflector-client
neighbor 22.1.1.1 remote-as 300
neighbor 22.1.1.1 update-source Loopback0
neighbor 22.1.1.1 route-reflector-client
neighbor 23.1.1.1 remote-as 300
neighbor 23.1.1.1 update-source Loopback0
neighbor 23.1.1.1 route-reflector-client
neighbor 28.1.1.1 remote-as 300
neighbor 28.1.1.1 update-source Loopback0
neighbor 28.1.1.1 route-reflector-client
neighbor 180.30.0.254 remote-as 100
neighbor 180.30.0.254 ebgp-multihop 255
neighbor 180.30.0.254 update-source FastEthernet0/0
neighbor 180.30.0.254 next-hop-self
no auto-summary
ip http server
no ip http secure-server
ipv6 router ospf 10
router-id 1.1.1.1
log-adjacency-changes
control-plane
banner motd ^CKLAS WAR HIER!!!^C
line con 0
exec-timeout 0 0
password 7 01100F175804
logging synchronous
login local
line aux 0
line vty 0 4
exec-timeout 0 0
password 7 060506324F41
logging synchronous
login local
transport input telnet
line vty 5 15
exec-timeout 0 0
password 7 060506324F41
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
O E2 200.1.0.0/24 [110/20] via 10.30.0.2, 20:36:55, Serial0/1/0.100 O E2 200.2.0.0/24 [110/20] via 10.30.0.2, 20:36:55, Serial0/1/0.100
O E2 200.3.0.0/24 [110/20] via 10.30.0.2, 20:36:55, Serial0/1/0.100
190.20.0.0/24 is subnetted, 1 subnets
B 190.20.0.0 [200/0] via 28.1.1.1, 21:16:05
190.30.0.0/24 is subnetted, 1 subnets
B 190.30.0.0 [200/0] via 8.1.1.1, 21:19:15
23.0.0.0/32 is subnetted, 1 subnets
0 23.1.1.1 [110/65] via 10.30.0.14, 20:36:55, Serial0/1/0.400
22.0.0.0/32 is subnetted, 1 subnets
O 22.1.1.1 [110/65] via 10.30.0.6, 20:36:55, Serial0/1/0.200
8.0.0.0/32 is subnetted, 1 subnets
O 8.1.1.1 [110/65] via 10.30.0.2, 20:36:55, Serial0/1/0.100
9.0.0.0/24 is subnetted, 1 subnets
C 9.1.1.0 is directly connected, Loopback0
10.0.0.0/30 is subnetted, 4 subnets
C 10.30.0.4 is directly connected, Serial0/1/0.200
C 10.30.0.0 is directly connected, Serial0/1/0.100 \,
C 10.30.0.12 is directly connected, Serial0/1/0.400
C 10.30.0.8 is directly connected, Serial0/1/0.300
28.0.0.0/32 is subnetted, 1 subnets
0 28.1.1.1 [110/65] via 10.30.0.10, 20:36:55, Serial0/1/0.300
180.30.0.0/24 is subnetted, 1 subnets
C 180.30.0.0 is directly connected, FastEthernet0/0
B* 0.0.0.0/0 [20/0] via 180.30.0.254, 20:45:34
```



show ipv6 route

```
IPv6 Routing Table - 16 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 ::, Serial0/1/0.100
L 2001:1::1/128 [0/0]
via ::, Serial0/1/0.100
C 2001:2::/64 [0/0]
via ::, Serial0/1/0.200
L 2001:2::1/128 [0/0]
via ::, Serial0/1/0.200
C 2001:3::/64 [0/0]
via ::, Serial0/1/0.300
L 2001:3::1/128 [0/0]
via ::, Serial0/1/0.300
C 2001:4::/64 [0/0]
via ::, Serial0/1/0.400
L 2001:4::1/128 [0/0]
via ::, Serial0/1/0.400
0 2001:8::1/128 [110/64]
via FE80::21A:E2FF:FEAB:4B32, Serial0/1/0.100
C 2001:9::/64 [0/0]
via ::, Loopback0
L 2001:9::1/128 [0/0]
via ::, Loopback0
0 2001:22::1/128 [110/64]
via FE80::2A93:FEFF:FE7B:12F8, Serial0/1/0.200
0 2001:23::1/128 [110/64]
via FE80::223:5EFF:FE06:63A0, Serial0/1/0.400
0 2001:28::1/128 [110/64]
via FE80::20A:F4FF:FE34:DCC0, Serial0/1/0.300
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 FastEthernet0/0 180.30.0.1 YES manual up up FastEthernet0/1 unassigned YES unset administratively down down Serial0/1/0 unassigned YES unset up up Serial0/1/0.100 10.30.0.1 YES manual up up Serial0/1/0.200 10.30.0.5 YES manual up up Serial0/1/0.300 10.30.0.9 YES manual up up Serial0/1/0.400 10.30.0.13 YES manual up up Serial0/1/1 unassigned YES unset administratively down down Loopback0 9.1.1.1 YES manual up up



show ipv6 int brief

FastEthernet0/0 [up/up] unassigned FastEthernet0/1 [administratively down/down] unassigned Serial 0/1/0 [up/up] unassigned Serial0/1/0.100 [up/up] FE80::21A:E2FF:FEAB:49DE 2001:1::1 Serial0/1/0.200 [up/up] FE80::21A:E2FF:FEAB:49DE 2001:2::1 Serial0/1/0.300 [up/up] FE80::21A:E2FF:FEAB:49DE 2001:3::1 Serial0/1/0.400 [up/up] FE80::21A:E2FF:FEAB:49DE 2001:4::1 Serial0/1/1 [administratively down/down] unassigned Loopback0 [up/up] FE80::21A:E2FF:FEAB:49DE 2001:9::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 R2-22_ISPC-B5 Ser 0/1/0.200 142 R S I 2811 Ser 0/2/0.202 R2-23_ISPC-B6 Ser 0/1/0.400 124 R S I 2811 Ser 0/1/0.402 R2-4_ISPC-B3 Ser 0/1/0.300 141 R S I 2621XM Ser 0/1.301 R3-8_CIX Fas 0/0 133 R S I CISCO2901 Gig 0/0/3 R2-8_ISPC-B1 Ser 0/1/0.100 142 R S I 2801 Ser 0/1/0.102
```



show ipv6 ospf 10

Routing Process "ospfv3 10" with ID 1.1.1.1

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 5
SPF algorithm executed 9 times
Number of LSA 18. Checksum Sum 0x07DF86

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 23.1.1.1 1 FULL/ - 00:00:39 17 Serial0/1/0.400 28.1.1.1 1 FULL/ - 00:00:32 15 Serial0/1/0.300 22.1.1.1 1 FULL/ - 00:00:32 13 Serial0/1/0.200 8.1.1.1 1 FULL/ - 00:00:31 15 Serial0/1/0.100



show ip bgp summary

```
BGP router identifier 9.1.1.1, local AS number 300
BGP table version is 9, main routing table version 9
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 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 1244 total bytes of memory
BGP activity 6/2 prefixes, 7/3 paths, scan interval 60 secs
Neighbor V AS MsgRcvd MsgSent TblVer InQ OutQ Up/Down State/PfxRcd
8.1.1.1 4 300 1290 1295 9 0 0 21:24:12 1
22.1.1.1 4 300 1275 1293 9 0 0 21:21:58 0
23.1.1.1 4 300 1261 1275 9 0 0 21:07:48 0
28.1.1.1 4 300 1290 1295 9 0 0 21:23:23 1
180.30.0.254 4 100 1379 1258 9 0 0 20:50:04 1
```



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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Compiled Fri 23-Mar-07 19:08 by prod_rel_team

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

R2-9_ISPC-B2 uptime is 21 hours, 32 minutes

System returned to ROM by reload at 14:16:07 UTC Thu Feb 23 2017 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.

Cisco 2801 (revision 6.0) with 119808K/11264K bytes of memory. Processor board ID FCZ110812Q0 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