show running-config

```
Current configuration : 2449 bytes

version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
service password-encryption

hostname R2-22_ISPC-B5

boot-start-marker
boot-end-marker

logging message-counter syslog
enable secret 5 $1$G4NZ$zvvd58ZsBR86lzenIWw9u/

no aaa new-model

dot11 syslog
ip source-route

ip cef

no ip domain lookup
ipv6 unicast-routing
ipv6 cef

multilink bundle-name authenticated

voice-card 0

username cisco privilege 15 secret 5 $1$bewT$X/WtxLXwzazQsNkuQ69n10
archive
log config
hidekeys
!

interface Loopback0
ip address 22.1.1.1 255.255.255.0
ipv6 address 2001:22::1/64
ipv6 enable
ipv6 ospf 10 area 1

interface FastEthernet0/0
ip address 200.5.0.1 255.255.255.0
duplex auto
speed auto

interface FastEthernet0/1
no ip address
shutdown
duplex auto
speed auto

interface Serial0/2/0
no ip address
encapsulation frame-relay
no keepalive
no fair-queue

interface Serial0/2/0.202 point-to-point
description to R2-20_ISPC
ip address 10.30.0.6 255.255.255.252
ipv6 address 2001:2::2/64
ipv6 enable
ipv6 ospf 10 area 1
frame-relay interface-dlci 202

interface Serial0/2/1
no ip address
shutdown
clock rate 2000000

router ospf 1
```

```
log-adjacency-changes
network 10.30.0.4 0.0.0.3 area 1
network 22.1.1.0 0.0.0.255 area 1

router bgp 300
bgp router-id 22.1.1.1
no bgp default ipv4-unicast
bgp log-neighbor-changes
neighbor 9.1.1.1 remote-as 300
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 9.1.1.1 activate
neighbor 9.1.1.1 next-hop-self
no auto-summary
no synchronization
network 200.5.0.0
exit-address-family
!
address-family ipv6
neighbor 2001:9::1 activate
no synchronization
exit-address-family

ip forward-protocol nd
no ip http server
no ip http secure-server

ipv6 router ospf 10
router-id 22.1.1.1
log-adjacency-changes

control-plane

banner motd ^CNot Authorized!^C

line con 0
exec-timeout 0 0
password 7 0822455D0A16
logging synchronous
login local
line aux 0
line vty 0 4
exec-timeout 0 0
password 7 05080F1C2243
logging synchronous
login local
transport input telnet
line vty 5 15
exec-timeout 0 0
password 7 05080F1C2243
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 not set

O E2 200.1.0.0/24 [110/20] via 10.30.0.5, 01:50:44, Serial0/2/0.202
O E2 200.2.0.0/24 [110/20] via 10.30.0.5, 01:50:44, Serial0/2/0.202
O E2 200.3.0.0/24 [110/20] via 10.30.0.5, 01:50:44, Serial0/2/0.202
23.0.0.0/32 is subnetted, 1 subnets
O 23.1.1.1 [110/129] via 10.30.0.5, 01:07:05, Serial0/2/0.202
22.0.0.0/24 is subnetted, 1 subnets
C 22.1.1.0 is directly connected, Loopback0
8.0.0.0/32 is subnetted, 1 subnets
O 8.1.1.1 [110/129] via 10.30.0.5, 01:50:44, Serial0/2/0.202
9.0.0.0/32 is subnetted, 1 subnets
O 9.1.1.1 [110/65] via 10.30.0.5, 01:50:45, Serial0/2/0.202
10.0.0.0/30 is subnetted, 4 subnets
C 10.30.0.4 is directly connected, Serial0/2/0.202
O 10.30.0.0 [110/128] via 10.30.0.5, 01:50:45, Serial0/2/0.202
O 10.30.0.12 [110/128] via 10.30.0.5, 01:50:45, Serial0/2/0.202
O 10.30.0.8 [110/128] via 10.30.0.5, 01:50:45, Serial0/2/0.202
28.0.0.0/32 is subnetted, 1 subnets
O 28.1.1.1 [110/129] via 10.30.0.5, 01:50:45, Serial0/2/0.202
```

show ipv6 route

```
IPv6 Routing Table - Default - 12 entries
Codes: C - Connected, L - Local, S - Static, U - Per-user Static route
B - BGP, M - MIPv6, R - RIP, I1 - ISIS L1
I2 - ISIS L2, IA - ISIS interarea, IS - ISIS summary, D - EIGRP
EX - EIGRP external
O - OSPF Intra, OI - OSPF Inter, OE1 - OSPF ext 1, OE2 - OSPF ext 2
ON1 - OSPF NSSA ext 1, ON2 - OSPF NSSA ext 2
O 2001:1::/64 [110/128]
via FE80::21A:E2FF:FEAB:49DE, Serial0/2/0.202
C 2001:2::/64 [0/0]
via Serial0/2/0.202, directly connected
L 2001:2::2/128 [0/0]
via Serial0/2/0.202, receive
O 2001:3::/64 [110/128]
via FE80::21A:E2FF:FEAB:49DE, Serial0/2/0.202
O 2001:4::/64 [110/128]
via FE80::21A:E2FF:FEAB:49DE, Serial0/2/0.202
O 2001:8::1/128 [110/128]
via FE80::21A:E2FF:FEAB:49DE, Serial0/2/0.202
O 2001:9::1/128 [110/64]
via FE80::21A:E2FF:FEAB:49DE, Serial0/2/0.202
C 2001:22::/64 [0/0]
via Loopback0, directly connected
L 2001:22::1/128 [0/0]
via Loopback0, receive
O 2001:23::1/128 [110/128]
via FE80::21A:E2FF:FEAB:49DE, Serial0/2/0.202
O 2001:28::1/128 [110/128]
via FE80::21A:E2FF:FEAB:49DE, Serial0/2/0.202
L FF00::/8 [0/0]
via Null0, receive
```

show ip int brief

```
Interface IP-Address OK? Method Status Protocol
FastEthernet0/0 200.5.0.1 YES manual up down
FastEthernet0/1 unassigned YES unset administratively down down
Serial0/2/0 unassigned YES unset up up
Serial0/2/0.202 10.30.0.6 YES manual up up
Serial0/2/1 unassigned YES unset administratively down down
Loopback0 22.1.1.1 YES manual up up
```

show ipv6 int brief

```
FastEthernet0/0 [up/down]
unassigned
FastEthernet0/1 [administratively down/down]
unassigned
Serial0/2/0 [up/up]
unassigned
Serial0/2/0.202 [up/up]
FE80::2A93:FEFF:FE7B:12F8
2001:2::2
Serial0/2/1 [administratively down/down]
unassigned
Loopback0 [up/up]
FE80::2A93:FEFF:FE7B:12F8
2001:22::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
R2-9_ISPC-B2 Ser 0/2/0.202 128 R S I 2801 Ser 0/1/0.200
```

show ipv6 ospf 10

```
Routing Process "ospfv3 10" with ID 22.1.1.1
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 18 times
Number of LSA 12. Checksum Sum 0x059E20
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/ - 00:00:34 16 Serial0/2/0.202
```

show ip bgp ipv6 unicast summary

```
BGP router identifier 22.1.1.1, local AS number 300
BGP table version is 7, main routing table version 7

Neighbor V AS MsgRcvd MsgSent TblVer InQ OutQ Up/Down State/PfxRcd
2001:9::1 4 300 126 124 7 0 0 00:09:01 0
```

show ip bgp summary

```
BGP router identifier 22.1.1.1, local AS number 300
BGP table version is 5, main routing table version 5

Neighbor V AS MsgRcvd MsgSent TblVer InQ OutQ Up/Down State/PfxRcd
9.1.1.1 4 300 0 0 0 0 0 never Active
```

show version

```
Cisco IOS Software, 2800 Software (C2800NM-ADVENTERPRISEK9-M), Version 12.4(24)T2, RELEASE
SOFTWARE (fc2)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2009 by Cisco Systems, Inc.
Compiled Mon 19-Oct-09 17:38 by prod_rel_team

ROM: System Bootstrap, Version 12.4(13r)T11, RELEASE SOFTWARE (fc1)

R2-22_ISPC-B5 uptime is 9 hours, 24 minutes
System returned to ROM by reload at 07:05:15 UTC Thu Feb 2 2017
System image file is "flash:c2800nm-adventerprisek9-mz.124-24.T2.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 2811 (revision 53.51) with 512000K/12288K bytes of memory.
Processor board ID FCZ142270AY
2 FastEthernet interfaces
2 Serial(sync/async) interfaces
1 Virtual Private Network (VPN) Module
DRAM configuration is 64 bits wide with parity enabled.
239K bytes of non-volatile configuration memory.
62720K bytes of ATA CompactFlash (Read/Write)

Configuration register is 0x2102
```