

show running-config

```
Current configuration: 2517 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 Loopback1
no ip address
shutdown
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
clock rate 2000000
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
\mathtt{network}\ 10.3\overset{-}{0}.0.4\ \overset{-}{0}.0.0.3\ \mathtt{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 ^CCNot 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

22.0.0.0/24 is subnetted, 1 subnets
C 22.1.1.0 is directly connected, Loopback0
```



show ipv6 route

IPv6 Routing Table - Default - 3 entries

Codes: C - Connected, L - Local, S - Static, U - Per-user Static route

B - BGP, M - MIPv6, R - RIP, II - 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

C 2001:22::/64 [0/0]

via Loopback0, directly connected

L 2001:22::1/128 [0/0]

via Loopback0, receive

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 manual administratively down down Serial0/2/0 unassigned YES manual down down Serial0/2/0.202 10.30.0.6 YES manual down down Serial0/2/1 unassigned YES manual administratively down down Loopback0 22.1.1.1 YES manual up up Loopback1 unassigned YES manual administratively down down



show ipv6 int brief

FastEthernet0/0 [up/down]
unassigned
FastEthernet0/1 [administratively down/down]
unassigned
Serial0/2/0 [down/down]
unassigned
Serial0/2/0.202 [down/down]
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
Loopback1 [administratively down/down]
unassigned



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 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 8 times Number of LSA 2. Checksum Sum 0x00D9BA Number of DCbitless LSA 0 Number of indication LSA ${\tt 0}$ Number of DoNotAge LSA 0Flood list length 0



show ipv6 ospf 10 neighbor



show ip bgp summary

BGP router identifier 22.1.1.1, 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 9.1.1.1 4 300 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 1 day, 2 hours, 3 minutes

System returned to ROM by reload at 14:50:07 UTC Thu Feb 16 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.

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