

Preferred address per subnet (1/4)

```
lab@srxA-1> show interfaces ge-0/0/1 terse
```

| Interface | Admin | Link | Proto | Local |
|------------|-------|------|-------|-----------------|
| ge-0/0/1 | up | up | | |
| ge-0/0/1.0 | up | up | inet | 10.1.0.1/24 |
| | | | | 10.1.0.2/24 |
| | | | | 10.1.0.3/24 |
| | | | | 172.16.0.1/24 |
| | | | | 172.16.0.2/24 |
| | | | | 172.16.0.3/24 |
| | | | | 192.168.16.1/24 |

```
lab@srxA-1> show interfaces ge-0/0/1
```

```
<more>
```

```
Logical interface ge-0/0/1.0 (Index 72) (SNMP ifIndex 521)
```

```
<more>
```

```
Addresses, Flags: Is-Preferred Is-Primary
```

```
Destination: 10.1.0/24, Local: 10.1.0.1, Broadcast: 10.1.0.255
```

```
Addresses
```

```
Destination: 10.1.0/24, Local: 10.1.0.2, Broadcast: 10.1.0.255
```

```
Addresses
```

```
Destination: 10.1.0/24, Local: 10.1.0.3, Broadcast: 10.1.0.255
```

```
Addresses, Flags: Is-Preferred
```

```
Destination: 172.16.0/24, Local: 172.16.0.1, Broadcast: 172.16.0.255
```

```
Addresses
```

```
Destination: 172.16.0/24, Local: 172.16.0.2, Broadcast: 172.16.0.255
```

```
Addresses
```

```
Destination: 172.16.0/24, Local: 172.16.0.3, Broadcast: 172.16.0.255
```

```
Addresses, Flags: Is-Preferred
```

```
Destination: 192.168.16/24, Local: 192.168.16.1, Broadcast: 192.168.16.255
```

```
lab@srxA-2> show interfaces ge-0/0/1 terse
```

| Interface | Admin | Link | Proto | Local |
|------------|-------|------|-------|-----------------|
| ge-0/0/1 | up | up | | |
| ge-0/0/1.0 | up | up | inet | 10.1.0.4/24 |
| | | | | 10.1.0.5/24 |
| | | | | 10.1.0.6/24 |
| | | | | 172.16.0.4/24 |
| | | | | 172.16.0.5/24 |
| | | | | 172.16.0.6/24 |
| | | | | 192.168.16.2/24 |

By default:
preferred address =
lowest IP address in the subnet

Preferred address per subnet (2/4)

```
lab@srxA-1> ping 10.1.0.4 rapid count 2
```

```
PING 10.1.0.4 (10.1.0.4): 56 data bytes
```

```
!!
```

```
--- 10.1.0.4 ping statistics ---
```

```
2 packets transmitted, 2 packets received, 0% packet loss
```

```
round-trip min/avg/max/stddev = 94.854/289.416/483.979/194.562 ms
```

```
lab@srxA-1> ping 10.1.0.5 rapid count 2
```

```
PING 10.1.0.4 (10.1.0.5): 56 data bytes
```

```
!!
```

```
--- 10.1.0.4 ping statistics ---
```

```
2 packets transmitted, 2 packets received, 0% packet loss
```

```
round-trip min/avg/max/stddev = 94.854/289.416/483.979/194.562 ms
```

```
lab@srxA-2> monitor traffic interface ge-0/0/1 layer2-headers detail
```

```
Address resolution is ON. Use <no-resolve> to avoid any reverse lookup delay.
```

```
Address resolution timeout is 4s.
```

```
<more>
```

```
00:26:12.612170 In 2c:c2:60:30:99:6a > Broadcast, ethertype ARP (0x0806), length 60: arp who-has 10.1.0.4 tell 10.1.0.1
```

```
00:26:12.617919 Out 2c:c2:60:20:5b:19 > 2c:c2:60:30:99:6a, ethertype ARP (0x0806), length 42: arp reply 10.1.0.4 is-at  
2c:c2:60:20:5b:19
```

```
00:27:50.182696 In 2c:c2:60:30:99:6a > Broadcast, ethertype ARP (0x0806), length 60: arp who-has 10.1.0.5 tell 10.1.0.1
```

Preferred address for subnet 10.1.0/24
Is used as source address when trying
to reach an address on that same network,



Preferred address per subnet (3/4)

```
lab@srxA-1> ping 172.16.0.5 rapid count 2
```

```
PING 172.16.0.5 (172.16.0.5): 56 data bytes
```

```
..!
```

```
--- 172.16.0.5 ping statistics ---
```

```
2 packets transmitted, 1 packets received, 50% packet loss
```

```
round-trip min/avg/max/stddev = 76.608/76.608/76.608/0.000 ms
```

```
lab@srxA-2> monitor traffic interface ge-0/0/1 layer2-headers detail
```

```
Address resolution is ON. Use <no-resolve> to avoid any reverse lookup delay.
```

```
Address resolution timeout is 4s.
```

```
Listening on ge-0/0/1, capture size 1514 bytes
```

```
Reverse lookup for 172.16.0.5 failed (check DNS reachability).
```

```
Other reverse lookup failures will not be reported.
```

```
Use <no-resolve> to avoid reverse lookups on IP addresses.
```

```
00:31:44.539773 In 2c:c2:60:30:99:6a > Broadcast, ethertype ARP (0x0806), length 60: arp who-has 172.16.0.5 tell 172.16.0.1
```

```
00:31:44.540128 Out 2c:c2:60:20:5b:19 > 2c:c2:60:30:99:6a, ethertype ARP (0x0806), length 42: arp reply 172.16.0.5 is-at 2c:c2:60:20:5b:19
```

```
[edit interfaces ge-0/0/1 unit 0 family inet]
```


```
lab@srxA-1# set address 172.16.0.3/24 preferred
```

```
[edit interfaces ge-0/0/1 unit 0 family inet]
```

```
lab@srxA-1# commit
```

```
commit complete
```

Preferred address for subnet 172.16.0/24
Is used as source address when trying
to reach an address on that same network,



172.16.0.1

Preferred address per subnet (4/4)

```
lab@srxA-1> show interfaces ge-0/0/1
```

```
<more>
```

```
Logical interface ge-0/0/1.0 (Index 72) (SNMP ifIndex 521)
```

```
<more>
```

```
Destination: 172.16.0/24, Local: 172.16.0.1, Broadcast: 172.16.0.255
```

```
Addresses
```

```
Destination: 172.16.0/24, Local: 172.16.0.2, Broadcast: 172.16.0.255
```

```
Addresses, Flags: Preferred Is-Preferred
```

```
Destination: 172.16.0/24, Local: 172.16.0.3, Broadcast: 172.16.0.255
```

```
Addresses, Flags: Is-Preferred
```

```
Destination: 192.168.16/24, Local: 192.168.16.1, Broadcast: 192.168.16.255
```

```
lab@srxA-1> ping 172.16.0.6 rapid count 2
```

```
PING 172.16.0.6 (172.16.0.6): 56 data bytes
```

```
..!
```

```
--- 172.16.0.6 ping statistics ---
```

```
2 packets transmitted, 1 packets received, 50% packet loss
```

```
round-trip min/avg/max/stddev = 12.431/12.431/12.431/0.000 ms
```

```
lab@srxA-2> monitor traffic interface ge-0/0/1 layer2-headers detail
```

```
Address resolution is ON. Use <no-resolve> to avoid any reverse lookup delay.
```

```
Address resolution timeout is 4s.
```

```
Listening on ge-0/0/1, capture size 1514 bytes
```

```
01:15:08.792632 In 2c:c2:60:30:99:6a > Broadcast, ethertype ARP (0x0806), length 60: arp who-has 172.16.0.6 tell 172.16.0.3
```

```
01:15:08.792872 Out 2c:c2:60:20:5b:19 > 2c:c2:60:30:99:6a, ethertype ARP (0x0806), length 42: arp reply 172.16.0.6 is-at
```

```
2c:c2:60:20:5b:19
```

Primary Address (1/2)

```
[edit protocols rip]
```

```
lab@srxA-1# show | display set relative
```

```
set group test export intoRIP
set group test neighbor ge-0/0/1.0
```

```
lab@srxA-2> monitor traffic interface ge-0/0/1 layer2-headers detail
```

```
Address resolution is ON. Use <no-resolve> to avoid any reverse lookup delay.
```

```
Address resolution timeout is 4s.
```

```
Listening on ge-0/0/1, capture size 1514 bytes
```

```
Reverse lookup for 172.16.0.5 failed (check DNS reachability).
```

```
Other reverse lookup failures will not be reported.
```

```
Use <no-resolve> to avoid reverse lookups on IP addresses.
```

Primary address for the interface is used as source address when sending RIP multicast packets of the interface.

```
01:03:19.728781 In PFE proto 2 (ipv4): (tos 0xc0, ttl 1, id 19756, offset 0, flags [none], proto: UDP (17), length: 92)
```

```
10.1.0.1.router > 224.0.0.9.router:
```

```
RIPv2, Response, length: 64, routes: 3
```

```
AFI: IPv4: 192.168.1.1/32, tag 0x0000, metric: 1, next-hop: self
```

```
AFI: IPv4: 192.168.1.10/32, tag 0x0000, metric: 1, next-hop: self
```

```
AFI: IPv4: 192.168.16.0/24, tag 0x0000, metric: 1, next-hop: self
```

```
[edit interfaces ge-0/0/1]
```

```
lab@srxA-1# set unit 0 family inet address 192.168.16.1/24 primary
```

```
[edit interfaces ge-0/0/1]
```

```
lab@srxA-1# commit
```

```
commit complete
```

Primary Address (2/2)

```
lab@srxA-2> monitor traffic interface ge-0/0/1 layer2-headers detail
```

```
Address resolution is ON. Use <no-resolve> to avoid any reverse lookup delay.
```

```
Address resolution timeout is 4s.
```

```
Listening on ge-0/0/1, capture size 1514 bytes
```

```
01:18:46.370867 In PFE proto 2 (ipv4): (tos 0xc0, ttl 1, id 39854, offset 0, flags [none], proto: UDP (17), length: 52)
```

```
192.168.16.1.router > 224.0.0.9.router:
```

```
    RIPv2, Request, length: 24
```

```
01:18:46.527212 In PFE proto 2 (ipv4): (tos 0xc0, ttl 1, id 39858, offset 0, flags [none], proto: UDP (17), length: 92)
```

```
192.168.16.1.router > 224.0.0.9.router:
```

```
    RIPv2, Response, length: 64, routes: 3
```

```
      AFI: IPv4:      192.168.1.1/32, tag 0x0000, metric: 1, next-hop: self
```

```
      AFI: IPv4:      192.168.1.10/32, tag 0x0000, metric: 1, next-hop: self
```

```
      AFI: IPv4:      192.168.16.0/24, tag 0x0000, metric: 1, next-hop: self
```

OSPF Router-id (1/1)

```
[edit protocols ospf]
lab@srxA-1# show| display set relative
set area 0.0.0.0 interface lo0.0
set area 0.0.0.0 interface ge-0/0/1.0

[edit protocols ospf]
lab@srxA-2# show | display set relative
set area 0.0.0.0 interface lo0.0
set area 0.0.0.0 interface ge-0/0/1.0

[edit interfaces lo0]
lab@srxA-1# show | display set relative
set unit 0 family inet address 192.168.1.1/32
set unit 0 family inet address 192.168.1.10/32
```

```
lab@srxA-1> show interfaces lo0.0
Logical interface lo0.0 (Index 73) (SNMP ifIndex 16)
<more>
Addresses, Flags: Is-Default Is-Primary
Local: 192.168.1.1
Addresses
Local: 192.168.1.10
```

```
lab@srxA-1> show ospf overview
Instance: master
Router ID: 192.168.1.1
Route table index: 0
<more>
```

Primary address for the loopback interface is used as Router-id (when not explicitly configured)

```
[edit interfaces lo0]
lab@srxA-1# set unit 0 family inet address 192.168.1.10/32 primary
```

```
[edit interfaces lo0]
lab@srxA-1# commit
```

```
[edit interfaces lo0]
lab@srxA-1# run show interfaces lo0.0
Logical interface lo0.0 (Index 73) (SNMP ifIndex 16)
<more>
Addresses
Local: 192.168.1.1
Addresses, Flags: Primary Is-Default Is-Primary
Local: 192.168.1.10
```

```
[edit interfaces lo0]
lab@srxA-1# run show ospf overview
Instance: master
Router ID: 192.168.1.10
```