**Exam** : **JN0-661**

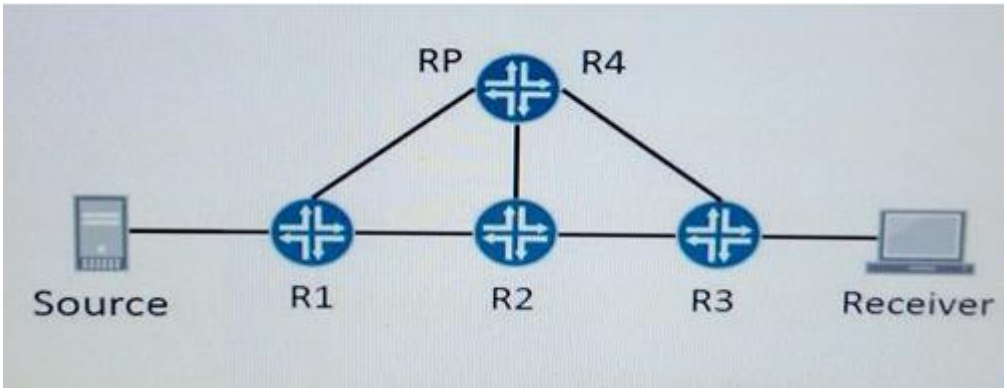
**Title** : Service Provider Routing and Switching

**Vendor** : Juniper

**Version** : DEMO

**NO.1** You have configured an MPLS LSP that includes defined hops.
For this path, you want the MPLS label to be popped at the egress node.
Which configuration statement meets this requirement?
**A.** Set protocols rsvp explicit-null, configured on the ingress node
**B.** Set protocols mpls explicit-null, configured on the egress node
**C.** Set protocols mpls explicit-null, configured on the ingress node
**D.** Set protocols rsvp implicit-null, configured on the egress node
***Answer:*** B

**NO.2** Click the Exhibit button.




Referring to the exhibit, you have a network that uses PIM-SM and you need to block certain PIM register messages.
Which two statements are correct in this situation? (Choose two.)
**A.** You should apply a policy that blocks PIM register messages from the source on R4.
**B.** You should apply a policy that blocks PIM register messages from the source on R3.
**C.** You should apply a policy that blocks PIM register messages from the source on R2.
**D.** You should apply a policy that blocks PIM register messages from the source on R1.
***Answer:*** A,D
Explanation:
You can filter Protocol Independent Multicast (PIM) register messages sent from the designated router (DR) or to the rendezvous point (RP).
Note: In a shared tree, the root of the distribution tree is a router, not a host, and is located somewhere in the core of the network. In the primary sparse mode multicast routing protocol, Protocol Independent Multicast sparse mode (PIM SM), the core router at the root of the shared tree is the rendezvous point (RP).
References:
http://www.juniper.net/documentation/en_US/junos15.1/topics/example/ospf-designated-router-election-configuring.html
http://www.juniper.net/techpubs/en_US/junos15.1/topics/topic-map/mcast-pim-filtering.html

**NO.3** During a network migration window, an engineer issues the set protocols isis overload timeout 1200 command.
In this scenario, which effect does this have on the IS-IS operations of the router?
**A.** After the first IS-IS adjacency forms, the overload bit is set for 1200 seconds.
**B.** When the IS-IS protocol starts, the overload bit is set after the timer of 1200 seconds expires.

**C.** When the IS-IS protocol starts, the overload bit is set for 1200 seconds.
**D.** After the first IS-IS adjacency forms, the overload bit is set after the timer of 1200 seconds expires.
***Answer:*** C
Explanation:
With a timeout, overload mode is set if the time elapsed since the IS-IS instance started is less than the specified timeout.
To specify the number of seconds at which overload is reset, include the timeout option when specifying the overload statement:
overload timeout seconds;
The time can range from 60 through 1800 seconds.
References: http://www.juniper.net/documentation/en_US/junos12.1x47/topics/usage-guidelines/routing-configuring-is-is-to-make-routers-appear-overloaded.html

**NO.4** -- Exhibit --
user@router> show route receive-protocol rip 2.2.2.2
inet.0: 15 destinations, 15 routes (15 active, 0 holddown, 0 hidden)
+ = Active Route, - = Last Active, * = Both
5 0.50.0.0/26 *[RIP/100] 00:09:12, metric 2, tag 0
> to 2.2.2.2 via fe-3/0/0.2
5 0.50.1.0/24 *[RIP/100] 00:32:24, metric 2, tag 0
> to 2.2.2.2 via fe-3/0/0.2
5 0.50.2.0/24 *[RIP/100] 00:32:24, metric 2, tag 0
> to 2.2.2.2 via fe-3/0/0.2
5 0.50.3.0/25 *[RIP/100] 00:32:24, metric 2, tag 0
> to 2.2.2.2 via fe-3/0/0.2
5 0.50.4.0/25 *[RIP/100] 00:32:24, metric 2, tag 0
> to 2.2.2.2 via fe-3/0/0.2
5 0.50.4.128/25 *[RIP/100] 00:32:24, metric 2, tag 0
> to 2.2.2.2 via fe-3/0/0.2
5 0.50.5.0/26 *[RIP/100] 00:32:24, metric 2, tag 0
> to 2.2.2.2 via fe-3/0/0.2
5 0.50.5.64/26 *[RIP/100] 00:32:24, metric 2, tag 0
> to 2.2.2.2 via fe-3/0/0.2
5 0.50.5.128/26 *[RIP/100] 00:32:24, metric 2, tag 0
> to 2.2.2.2 via fe-3/0/0.2
-- Exhibit --
Click on the Exhibit button.
Referring to the exhibit, how should an export policy be configured to export only the 50.50.1.0/24 RIP summary route into OSPF?
**A.** [edit policy-options policy-statement RIP-redist]
user@router# show
term 1 {
from {
protocol rip;
route-filter 50.50.1.0/24 exact;
}

then accept;
}
term 2 {
from {
protocol rip;
route-filter 50.50.0.0/24 upto /27;
}
then reject;
}
term 3 {
from protocol rip;
then accept;
}

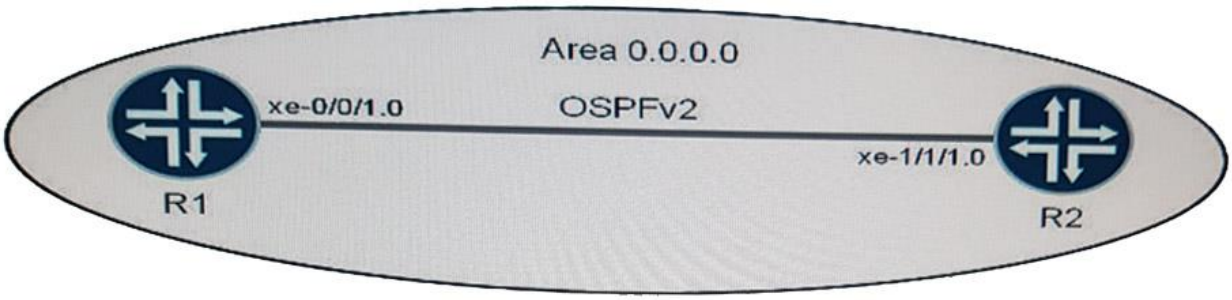
**B.** [edit policy-options policy-statement RIP-redist]
user@router# show
term 1 {
from {
protocol rip;
route-filter 50.50.0.0/24 upto /27;
}
then reject;
}
term 2 {
from {
protocol rip;
route-filter 50.50.1.0/24 exact;
}
then accept;
}
term 3 {
from protocol rip;
then accept;
}

**C.** [edit policy-options policy-statement RIP-redist]
user@router# show
term 1 {
from {
protocol rip;
route-filter 50.50.0.0/16 prefix-length-range /24-/26;
}
then reject;
}
term 2 {
from {
protocol rip;
route-filter 50.50.1.0/24 exact;

}
then accept;
}
**D.** [edit policy-options policy-statement RIP-redist]
user@router# show
term 1 {
from {
protocol rip;
route-filter 50.50.1.0/24 exact;
}
then accept;
}
term 2 {
from {
protocol rip;
route-filter 50.50.0.0/16 prefix-length-range /24-/26;
}
then reject;
}
***Answer:*** D

**NO.5** You are connecting your OSPF router to your customer's RIP router and redistributing the customer's routes into your OSPF domain. Your OSPF route is part of an NSSA and the ABR is injecting an OSPF default route, which you have advertised to your customer. After committing the configuration, you notice a routing loop between your OSPF router and the customer's RIP router. Which action must you perform on your OSPF router to solve this problem?
**A.** Enable Type 7-to-Type 5 LSA conversion.
**B.** Set the customer-facing interface to passive.
**C.** Convert the area to a stub area.
**D.** Change the OSPF external route preference.
***Answer:*** D
Explanation:
Avoid routing loops by changing the OSPF external route preference.

**NO.6** Click the Exhibit button.




user@R1> show ospf interface detail
Interface State Area DR ID BDR ID Nbrs

xe-0/0/1.0 BDR 0.0.0.0 2.169.37.12 11.244.245.215 1
Type LAN, address 192.161.27.11, Mask 255.255.255.248, MTU 4460, Cost 40 DR addr 192.161.37.12, BDR addr 192.168.37.11, Adj count 1, Priority 128 Hello 10, Dead 40, ReXmit 5, Not Stub fe-0/2/1.0 PtToPt 0.0.0.0 0.0.0.0 0.0.0.0 Type P2P, Address 0.0.0.0, Mask 0.0.0.0, MTU 1500, Cost 2604 Adj count 0 Hello 10, Dead 40, ReXmit 5, Not stub Auth type: MDS, Active key ID 3, Start time 2013 Jul 19 10:00:00 PST IPsec SA Name: sa user@R2> show ospf interface detail
Interface State Area DR ID BDR ID Nbrs
xe-1/1/1.0 BDR 0.0.0.0 192.168.37.12 11.244.245.216 1
Type LAN, address 192.161.27.12, Mask 255.255.255.248, MTU 4460, Cost 40 DR addr 192.161.37.12, BDR addr 192.168.37.11, Adj count 1, Priority 128 Hello 3, Dead 9, ReXmit 5, Not stub fe-2/2/2.0 PtToPt 0.0.0.0 0.0.0.0 0.0.0.0 Type P2P, address 0.0.0.0, Mask 0.0.0.0, MTU 1500, Cost 2604 Adj count 0 Hello 10, Dead 40, ReXmit 5, Not Stub Auth type: MDS, Active key ID 3, Start time 2013 Jul 19 10:00:00 PST IPsec SA Name: sa Which two statements are true about the OSPF adjacency displayed in the exhibit?
(Choose two.)

**A.** There is a mismatch in the dead interval parameter between routers R1 and R2.

**B.** There is a mismatch in the hold timer parameter between routers R1 and R2.

**C.** There is a mismatch in the hello interval parameter between routers R1 and R2.

**D.** There is a mismatch in the poll interval parameter between routers R1 and R2.

***Answer:*** A,C

Explanation:
If the timers are equal, which they are by default in JUNOS (for LAN/P2P the Hello = 10s and Dead = 40s), the neighbors will establish a relationship (at least on 1 side).
There is a Hello and Dead parameter mismatch. On R1 we see:
On R1 we see:
DR addr 192.161.37.12, BDR addr 192.168.37.11, Adj count 1, Priority 128 Hello 10, Dead 40, ReXmit 5, Not Stub while on R2 we see:
DR addr 192.161.37.12, BDR addr 192.168.37.11, Adj count 1, Priority 128 Hello 3, Dead 9, ReXmit 5, Not stub References: https://inetzero.com/what-is-your-ospf-neighbor-doing-adjancency-problems-in-ospf/

**NO.7** You are asked to implement a BGP-signaled VPLS network for a new customer. Which two statements are correct regarding this implementation? (Choose two.)

**A.** A full mesh of LDP sessions between PEs must be configured.

**B.** The PE routers distribute VPLS-to-label mapping using MP-IBGP.

**C.** These MP-BGP sessions must be configured to support the I2vpn signaling address family.

**D.** These MP-BGP sessions must be configured to support the inet-vpn signaling address family.

***Answer:*** B,C

**NO.8** Which two statements regarding OSPFv2 or OSPFv3 authentication are correct? (Choose two.)

**A.** OSPFv2 supports MD5 authentication.

**B.** OSPFv2 supports MD5 or SHA authentication.

**C.** OSPFv2 relies on the native security stack that uses IPsec.

**D.** OSPFv3 relies on the native security stack that uses IPsec.

***Answer:*** D

**NO.9** Given the following regular expression:
.* 14203+(21870110458)
Which two AS paths match? (Choose two.)
**A.** 27522 2187010458
**B.** 27522 14203 14203 14203 21870
**C.** 14203 21780 10458
**D.** 14203 21780 27522
***Answer:*** B,C

**NO.10** Refer to the exhibit.

```
user@router> show route receive-protocol rip 2.2.2.2

inet.0: 15 destinations, 15 routes (15 active, 0 holddown, 0 hidden)
+ = Active Route, - = Last Active, * = Both
50.50.0.0/26        *[RIP/100] 00:09:12, metric 2, tag 0
                      > to 2.2.2.2 via fe-3/0/0.2
50.50.1.0/24        *[RIP/100] 00:32:24, metric 2, tag 0
                      > to 2.2.2.2 via fe-3/0/0.2
50.50.2.0/24        *[RIP/100] 00:32:24, metric 2, tag 0
                      > to 2.2.2.2 via fe-3/0/0.2
50.50.3.0/25        *[RIP/100] 00:32:24, metric 2, tag 0
                      > to 2.2.2.2 via fe-3/0/0.2
50.50.4.0/25        *[RIP/100] 00:32:24, metric 2, tag 0
                      > to 2.2.2.2 via fe-3/0/0.2
50.50.4.128/25      *[RIP/100] 00:32:24, metric 2, tag 0
                      > to 2.2.2.2 via fe-3/0/0.2
50.50.5.0/26        *[RIP/100] 00:32:24, metric 2, tag 0
                      > to 2.2.2.2 via fe-3/0/0.2
50.50.5.64/26       *[RIP/100] 00:32:24, metric 2, tag 0
                      > to 2.2.2.2 via fe-3/0/0.2
50.50.5.128/26      *[RIP/100] 00:32:24, metric 2, tag 0
                      > to 2.2.2.2 via fe-3/0/0.2
```

A.

```
[edit policy-options policy-statement RIP-redist]
user@router# show
term 1 {
    from {
        protocol rip;
        route-filter 50.50.1.0/24 exact;
    }
    then accept;
}
term 2 {
    from {
        protocol rip;
        route-filter 50.50.0.0/24 upto /27;
    }
    then reject;
}
term 3 {
    from protocol rip;
    then accept;
}
```

B.

```
[edit policy-options policy-statement RIP-redist]
user@router# show
term 1 {
    from {
        protocol rip;
        route-filter 50.50.0.0/24 upto /27;
    }
    then reject;
}
term 2 {
    from {
        protocol rip;
        route-filter 50.50.1.0/24 exact;
    }
    then accept;
    }
    term 3 {
        from protocol rip;
        then accept;
    }
```

C.

```
[edit policy-options policy-statement RIP-redist]
user@router# show
term 1 {
    from {
        protocol rip;
        route-filter 50.50.0.0/16 prefix-length-range /24-/26;
    }
    then reject;
}
term 2 {
    from {
        protocol rip;
        route-filter 50.50.1.0/24 exact;
    }
    then accept;
}
```

D.

```
[edit policy-options policy-statement RIP-redist]
user@router# show
term 1 {
    from {
        protocol rip;
        route-filter 50.50.1.0/24 exact;
    }
    then accept;
}
term 2 {
    from {
        protocol rip;
        route-filter 50.50.0.0/16 prefix-length-range /24-/26;
    }
    then reject;
}
```

**A.** Option A
**B.** Option B
**C.** Option C
**D.** Option D
***Answer:*** D

**NO.11** Which routing instance type is used with a Layer 2 VPN?
**A.** 12vpn
**B.** vrf
**C.** no-forwarding
**D.** virtual-switch
***Answer:*** D
Explanation:
You can configure three types of routing instances (instance-types) in Layer 2 networks on MX Series routers: layer2-control, virtual-switch, and vpls.

**NO.12** Refer to the exhibit.

```
[edit routing-instances vpn-a]
user@PE2# show
instance-type l2vpn;
interface ge-1/0/4.513;
interface ge-1/0/4.512
route-distinguisher 192.168.1.2:1;
vrf-import import-vpn-a;
vrf-export export-vpn-a;
protocols {
    l2vpn {
        encapsulation-type ethernet-vlan;
        site ce-A {
            site-identifier 2;
            interface ge-1/0/4.512;
            interface ge-1/0/4.513;
        }
    }
}
```

You have the Layer 2 VPN configuration shown in the exhibit. You have been asked to determine the remote site ID for ge-1/0/4.512. What is the remote site ID?
**A.** 1
**B.** 3
**C.** 4
**D.** unspecified
***Answer:*** A