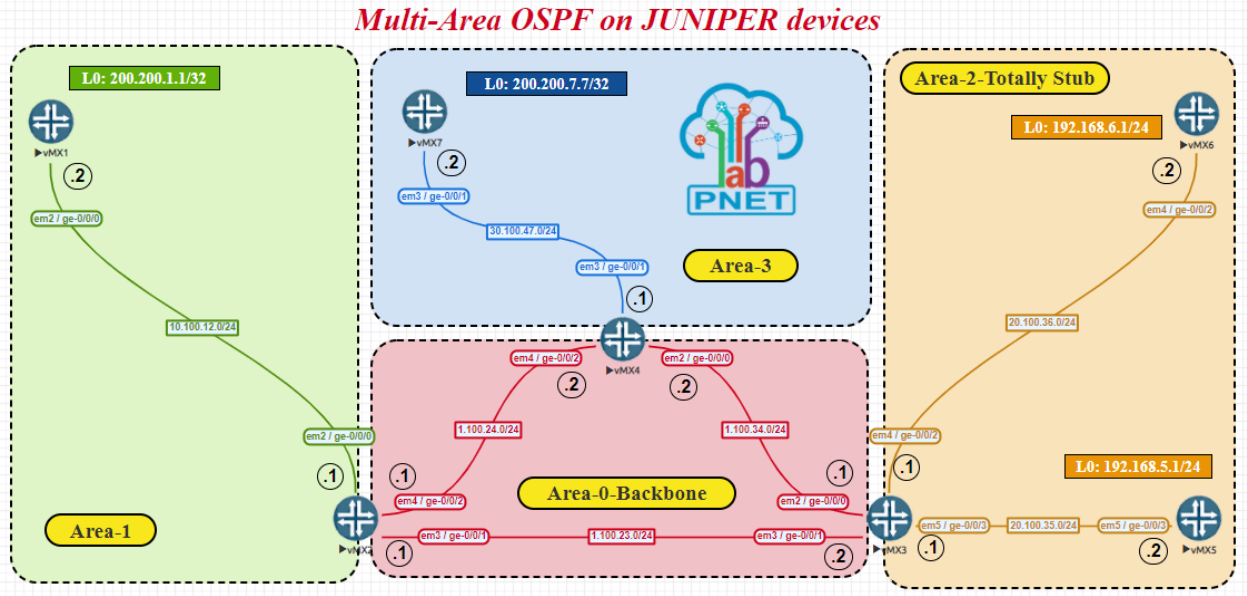
Multi-Area OSPF on JUNIPER devices

1. Lab Topology



2. Requirements

OSPF routing.

JUNIPER configuration.

3. Lab Objective

This lab will show you how to configure Multi-Area OSPF on JUNIPER devices.

4. Protocols

OSPF.

5.Lab Guide

This lab has 3 steps:

- Step 1: Configure IP address on interfaces.
- Step 2: Configure OSPF area 0 - Backbone, 1, 2 - Totally Stub, 3.
- Step 3: Checking config.

6. Solution:

vMX1:

```
set interfaces ge-0/0/0 unit 0 family inet address 10.100.12.1/24
set interfaces lo0 unit 0 family inet address 200.200.1.1/32
set protocols ospf area 0.0.0.1 interface ge-0/0/0.0
set protocols ospf area 0.0.0.1 interface lo0.0
```

vMX2:

```
set interfaces ge-0/0/0 unit 0 family inet address 10.100.12.2/24
set interfaces ge-0/0/1 unit 0 family inet address 1.100.23.1/24
set interfaces ge-0/0/2 unit 0 family inet address 1.100.24.1/24
set protocols ospf area 0.0.0.0 interface ge-0/0/1.0
set protocols ospf area 0.0.0.0 interface ge-0/0/2.0
set protocols ospf area 0.0.0.1 interface ge-0/0/0.0
```

vMX3:

```
set interfaces ge-0/0/0 unit 0 family inet address 1.100.34.1/24
set interfaces ge-0/0/1 unit 0 family inet address 1.100.23.2/24
set interfaces ge-0/0/2 unit 0 family inet address 20.100.36.1/24
set interfaces ge-0/0/3 unit 0 family inet address 20.100.35.1/24
set protocols ospf area 0.0.0.0 interface ge-0/0/1.0
set protocols ospf area 0.0.0.0 interface ge-0/0/0.0
set protocols ospf area 0.0.0.2 stub no-summaries
set protocols ospf area 0.0.0.2 interface ge-0/0/2.0
set protocols ospf area 0.0.0.2 interface ge-0/0/3.0
```

vMX4:

```
set interfaces ge-0/0/0 unit 0 family inet address 1.100.34.2/24
set interfaces ge-0/0/1 unit 0 family inet address 30.100.47.1/24
set interfaces ge-0/0/2 unit 0 family inet address 1.100.24.2/24
set protocols ospf area 0.0.0.0 interface ge-0/0/0.0
set protocols ospf area 0.0.0.0 interface ge-0/0/2.0
set protocols ospf area 0.0.0.3 interface ge-0/0/1.0
```

vMX5:

```
set interfaces ge-0/0/3 unit 0 family inet address 20.100.35.2/24
set interfaces lo0 unit 0 family inet address 192.168.5.1/24
set protocols ospf area 0.0.0.2 stub no-summaries
set protocols ospf area 0.0.0.2 interface ge-0/0/3.0
set protocols ospf area 0.0.0.2 interface lo0.0
```

vMX6:

```
set interfaces ge-0/0/2 unit 0 family inet address 20.100.36.2/24
set interfaces lo0 unit 0 family inet address 192.168.6.1/24
set protocols ospf area 0.0.0.2 stub no-summaries
set protocols ospf area 0.0.0.2 interface ge-0/0/2.0
set protocols ospf area 0.0.0.2 interface lo0.0
```

vMX7:

```
set interfaces ge-0/0/1 unit 0 family inet address 30.100.47.2/24
set interfaces lo0 unit 0 family inet address 200.200.7.7/24
set protocols ospf area 0.0.0.3 interface ge-0/0/1.0
set protocols ospf area 0.0.0.3 interface lo0.0
```