

# Project 6 Demo Questions

## Part 1. Explain your code. (60%)

Preparation:

- (1) Show your code in any editor
- (2) Open ONOS and activate fpm and fwd applications
- (3) Build project6 topology with your Makefile
- (4) Test the connection between h1 and h3
- (5) Show the routing information in ONOS console

Questions:

Explain why ping works

- Explain BGP mechanism (15%)
- Explain the relationship between zebra and bgpd (15%)
- Explain why h1 knows the packets destined for h3 should be sent to R1 (15%)
- Explain why R1 knows the packets destined for h3 should be sent to R3 (15%)

## Part 2. Modify your code. (40%)

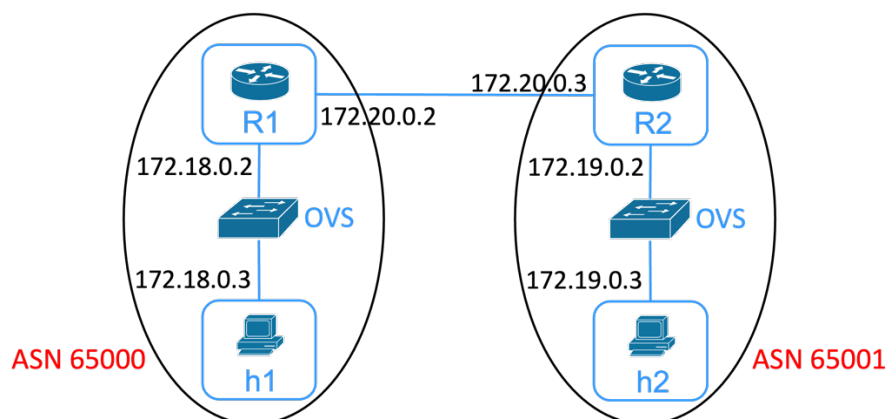
Preparation:

- (1) Make a copy of your application
- (2) Keep ONOS on

Questions:

Build a topology with your Makefile as below:

- Container creation (10%)
- OVS creation (10%)
- h1 can ping h2 (20%)



Hint1: You should add the following command to your Makefile **after setting up the links**

- `docker exec h1 ip route add default via 172.18.0.2`
- `docker exec h2 ip route add default via 172.19.0.2`

Hint2: You should add the following config in your docker-compose.yml to avoid subnet conflicts

```
networks:
```

```
  default:
```

```
    driver: bridge
```

```
    ipam:
```

```
      config:
```

```
        - subnet: 172.30.0.0/16
```