



**LOMBA KOMPETENSI SISWA  
SEKOLAH MENENGAH KEJURUAN  
TINGKAT NASIONAL XXVIII 2020**



**TEST PROJECT**

**IT NETWORK SYSTEMS  
ADMINISTRATION**

**LKS2020\_ Packet Tracer Troubleshooting**

## Module Packet Tracer Troubleshooting Scenario

There will be 5 “Trouble tickets” to solve, each ticket describes a situation from a user perspective. The trouble tickets will be presented in paperform, just like the example on the next page. You have to write your answers regarding “What is the cause of the problem” and the “Recommended solution to fix this” for each Trouble ticket.

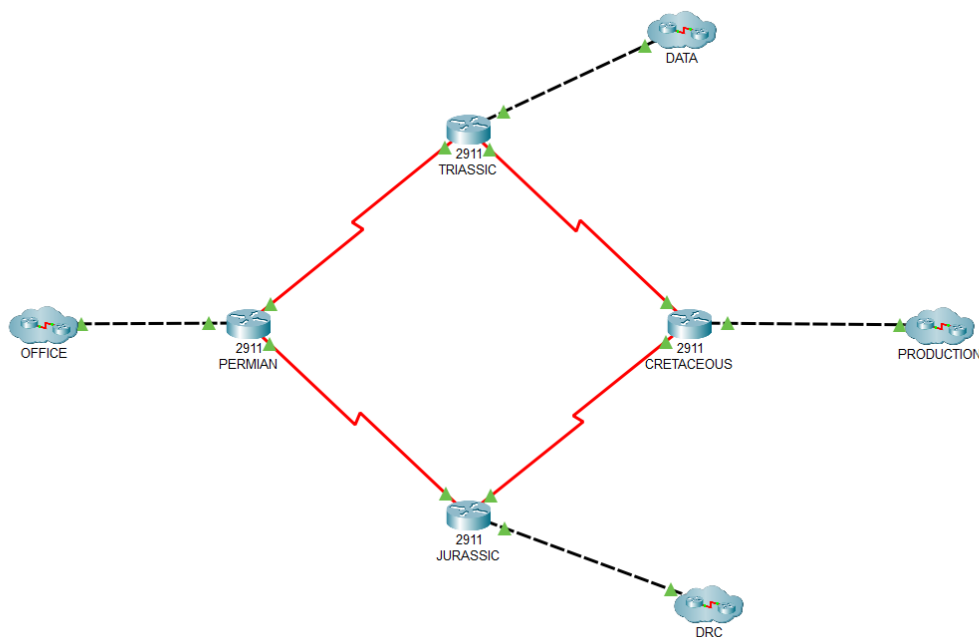
For all answers, the judgment teams will NOT judge your spelling, grammar or wordings, only the actual cause and solutions.

## Engineering Notes

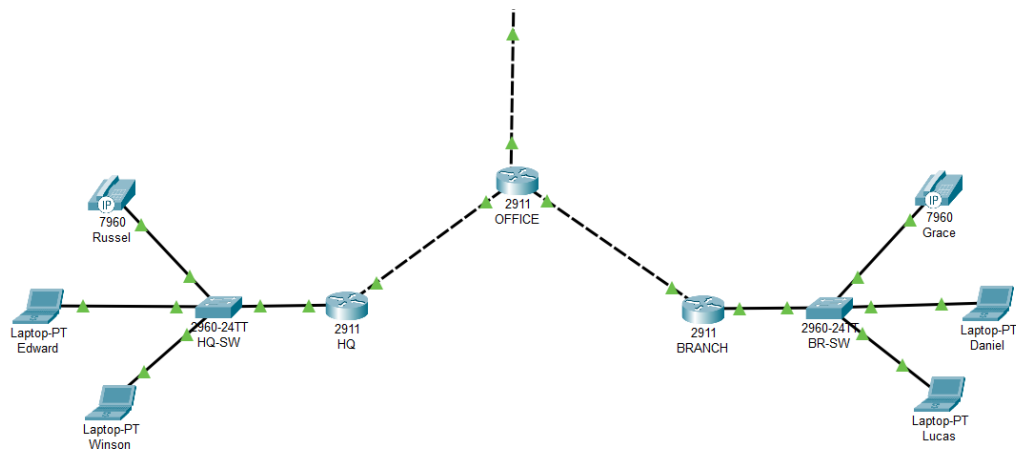
Hi, welcome to NSA-ID, NSA-ID building new infrastructure to expand the reach of its business processes. By utilizing various technologies from Cisco such as Routing, Switching, site to site VPN, and Voice over IP. However, building this infrastructure requires more network engineers, and you are a new network engineer at NSA-ID. Your first task is to fix some problems on the existing network from a user perspective.

## Network Diagram

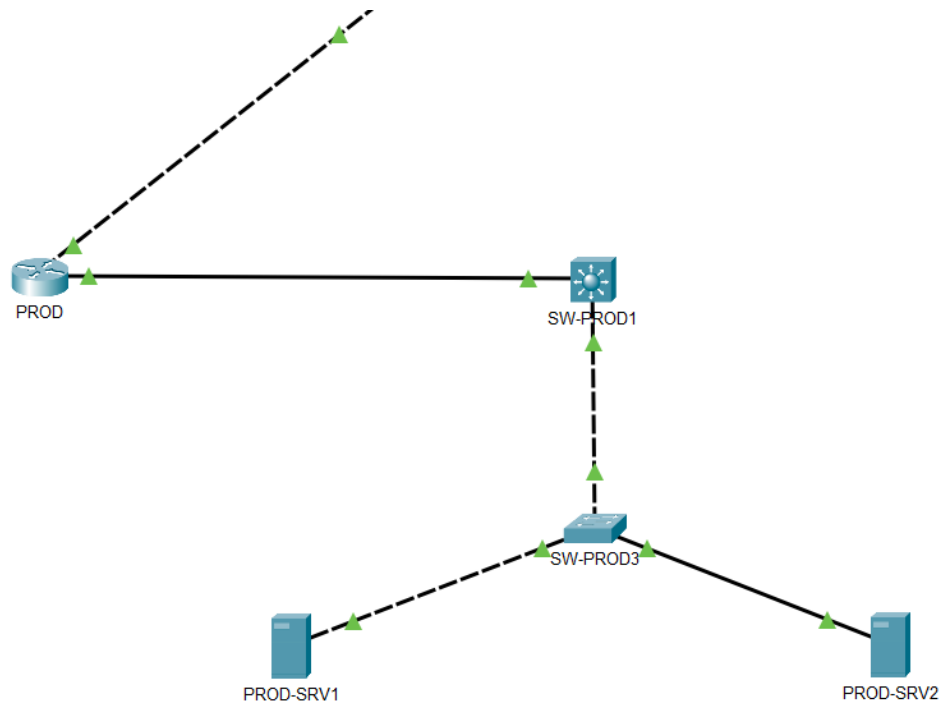
- Core Network



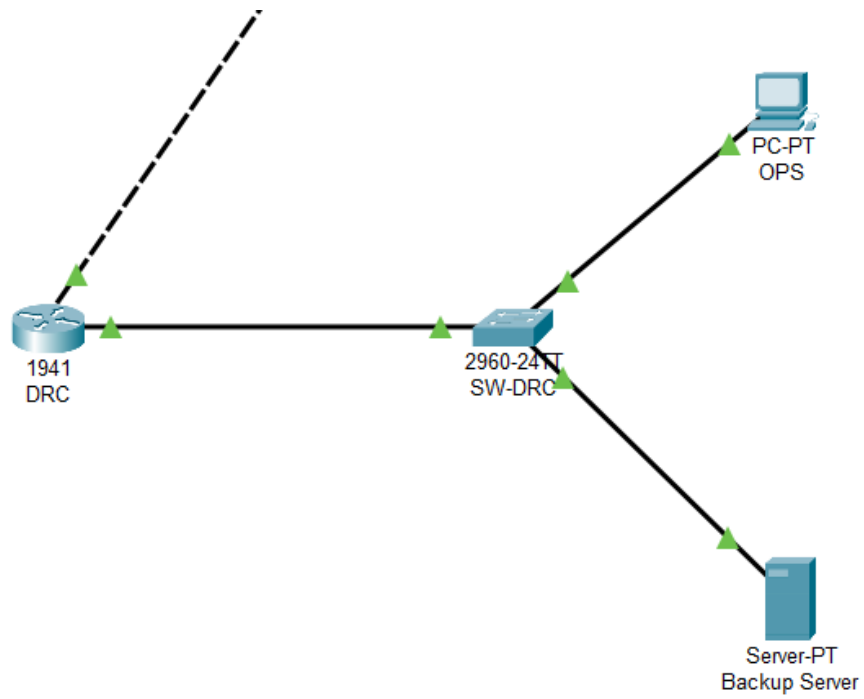
- Office Cluster



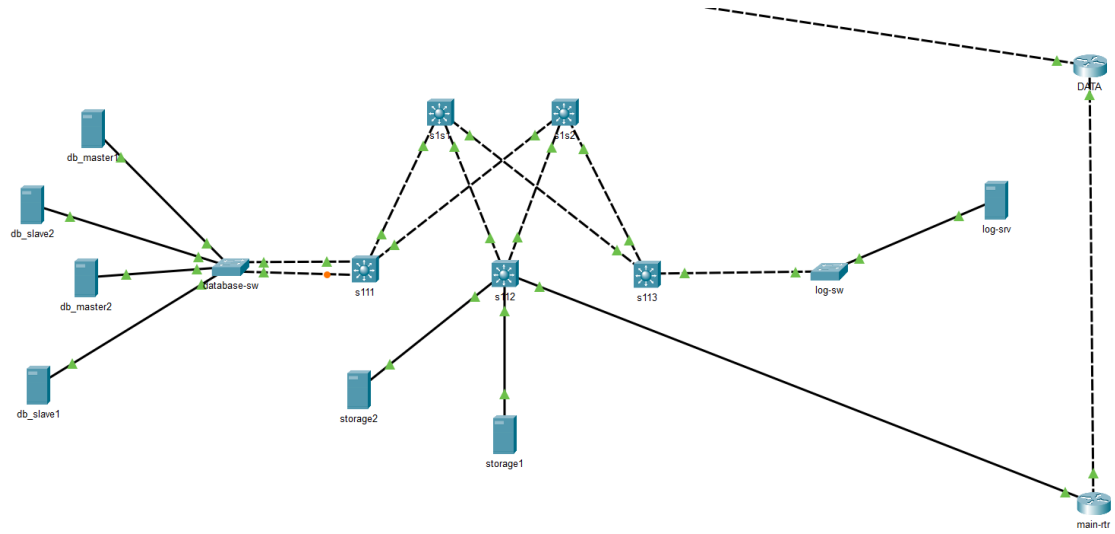
- Production Cluster



- DRC Cluster



- Data Cluster



## TICKET TROUBLESHOOTING

### #Ticket 1

- On DRC Cluster, Backup Server can't resolve domain [www.itnsa.id](http://www.itnsa.id) for synchronize core apps. This is very dangerous, because NSA-ID just have one backup server. As a new network engineer please fix this issue.

### #Ticket 2

- Report from Russel shows that productivity on HQ area is showing negative trend. One of the cause is VoIP calls often failed, which makes communication between employees ineffective. Fix the trouble and make sure that end devices on the site can call each other.

### #Ticket 3

- We have been trying to synchronize data from each server in the data cluster, but there's no connectivity. Please fix this as soon as possible because at the current time we have no "good backup" for data cluster.

### #Ticket 4

- We have report form Office Cluster, they are can't communication to another cluster. As a new network engineer NSA-ID, please fix this issue.

### #Ticket 5

- Report from Ops on DRC Cluster, he will access to the Production server (Prod-SRV1 and Prod-SRV2) via SSH for some reason. But when he tried it, he couldn't connect to the production cluster. Do you have any ideas to solve this problem?