* CIDR dengan UMLDiagram

  Description automatically generatedDiagram

  Description automatically generatedDiagram

  Description automatically generatedDiagram

  Description automatically generatedDiagram

  Description automatically generatedDiagram

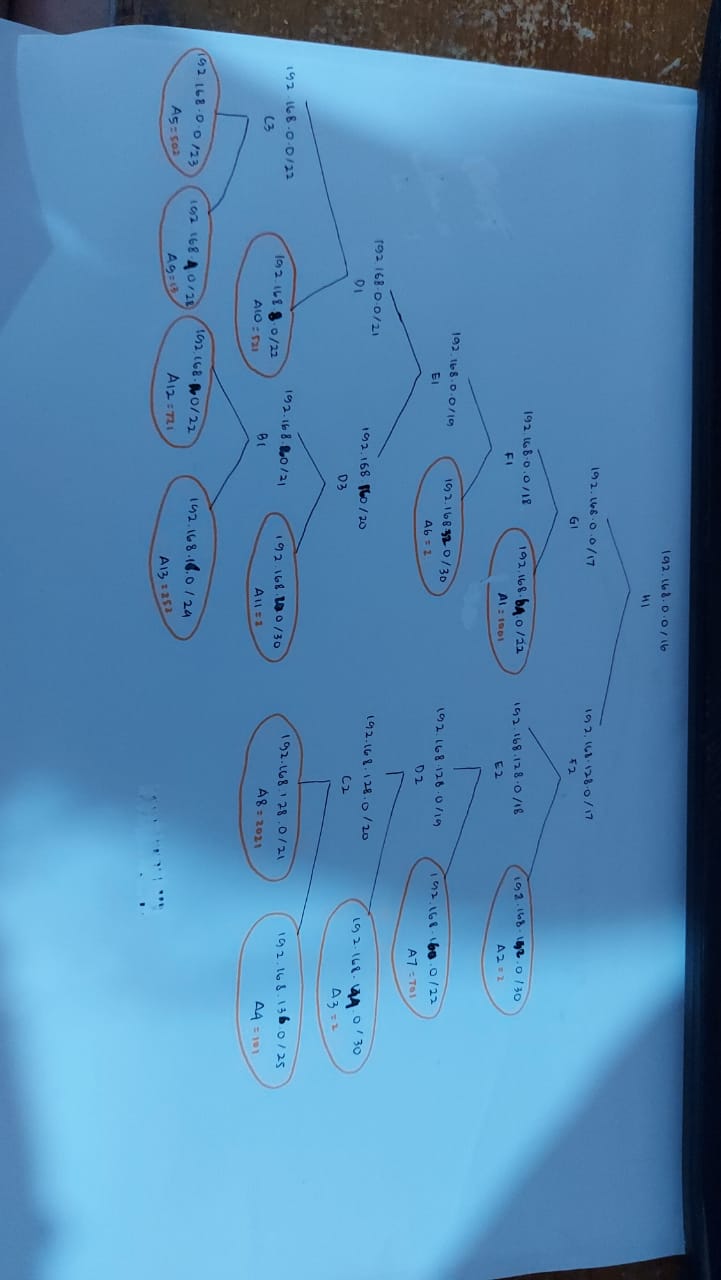
  Description automatically generated

Diagram

Description automatically generated

Text, letter

Description automatically generated

REVISI-----------------------

|  |  |  |
| --- | --- | --- |
| subnet | jumlah IP | netmask |
| A1 | 1001 | /22 |
| A2 | 2 | /30 |
| A3 | 2 | /30 |
| A4 | 101 | /25 |
| A5 | 502 | /23 |
| A6 | 2 | /30 |
| A7 | 701 | /22 |
| A8 | 2021 | /21 |
| A9 | 13 | /28 |
| A10 | 521 | /22 |
| A11 | 2 | /30 |
| A12 | 721 | /22 |
| A13 | 252 | /24 |
|  |  |  |
|  |  |  |
| A1 | network ID | 192.168.64.0 |
| netmask | 255.255.252.0 |
| broadcast address | 192.168.67.255 |
| A2 | network ID | 192.168.192.0 |
| netmask | 255.255.255.252 |
| broadcast address | 192.168.192.3 |
| A3 | network ID | 192.168.144.0 |
| netmask | 255.255.255.252 |
| broadcast address | 192.168.144.3 |
| A4 | network ID | 192.168.136.0 |
| netmask | 255.255.255.128 |
| broadcast address | 192.168.136.127 |
| A5 | network ID | 192.168.0.0 |
| netmask | 255.255.254.0 |
| broadcast address | 192.168.1.255 |
| A6 | network ID | 192.168.32.0 |
| netmask | 255.255.255.252 |
| broadcast address | 192.168.32.3 |
| A7 | network ID | 192.168.160.0 |
| netmask | 255.255.252.0 |
| broadcast address | 192.168.163.255 |
| A8 | network ID | 192.168.128.0 |
| netmask | 255.255.248.0 |
| broadcast address | 192.168.135.255 |
| A9 | network ID | 192.168.4.0 |
| netmask | 255.255.255.240 |
| broadcast address | 192.168.4.15 |
| A10 | network ID | 192.168.8.0 |
| netmask | 255.255.252.0 |
| broadcast address | 192.168.11.255 |
| A11 | network ID | 192.168.20.0 |
| netmask | 255.255.255.252 |
| broadcast address | 192.168.20.3 |
| A12 | network ID | 192.168.16.0 |
| netmask | 255.255.252.0 |
| broadcast address | 192.168.19.255 |
| A13 | network ID | 192.168.18.0 |
| netmask | 255.255.255.0 |
| broadcast address | 192.168.18.255 |

|  |  |  |
| --- | --- | --- |
| MOJOKERTO | network ID | 10.151.73.56 |
| netmask | 255.255.255.252 |
| MALANG | network ID | 10.151.73.58 |
| netmask | 255.255.252.0 |
| CLOUD | network ID | 10.151.72.28 |
| netmask | 255.255.255.0 |

* **Topologi**

# Switch

uml\_switch -unix switch1 > /dev/null < /dev/null &

uml\_switch -unix switch2 > /dev/null < /dev/null &

uml\_switch -unix switch3 > /dev/null < /dev/null &

uml\_switch -unix switch4 > /dev/null < /dev/null &

uml\_switch -unix switch5 > /dev/null < /dev/null &

uml\_switch -unix switch6 > /dev/null < /dev/null &

uml\_switch -unix switch7 > /dev/null < /dev/null &

uml\_switch -unix switch8 > /dev/null < /dev/null &

uml\_switch -unix switch9 > /dev/null < /dev/null &

uml\_switch -unix switch10 > /dev/null < /dev/null &

uml\_switch -unix switch11 > /dev/null < /dev/null &

uml\_switch -unix switch12 > /dev/null < /dev/null &

uml\_switch -unix switch13 > /dev/null < /dev/null &

uml\_switch -unix switch14 > /dev/null < /dev/null &

uml\_switch -unix switch15 > /dev/null < /dev/null &

# Router

xterm -T SURABAYA -e linux ubd0=SURABAYA,jarkom umid=SURABAYA eth0=tuntap,,,10.151.72.29 eth1=daemon,,,switch15 eth2=daemon,,,switch10 eth3=daemon,,,switch9 eth4=daemon,,,switch1 mem=64M &

xterm -T PASURUAN -e linux ubd0=PASURUAN,jarkom umid=PASURUAN eth0=daemon,,,switch10 eth1=daemon,,,switch12 eth2=daemon,,,switch11 mem=64M &

xterm -T PROBOLINGGO -e linux ubd0=PROBOLINGGO,jarkom umid=PROBOLINGGO eth0=daemon,,,switch12 eth1=daemon,,,switch14 eth2=daemon,,,switch13 mem=64M &

xterm -T BATU -e linux ubd0=BATU,jarkom umid=BATU eth0=daemon,,,switch9 eth1=daemon,,,switch5 eth2=daemon,,,switch6 eth3=daemon,,,switch8 mem=64M &

xterm -T KEDIRI -e linux ubd0=KEDIRI,jarkom umid=KEDIRI eth0=daemon,,,switch5 eth1=daemon,,,switch4 eth2=daemon,,,switch2 mem=64M &

xterm -T BLITAR -e linux ubd0=BLITAR,jarkom umid=BLITAR eth0=daemon,,,switch4 eth1=daemon,,,switch3 mem=64M &

xterm -T MADIUN -e linux ubd0=MADIUN,jarkom umid=MADIUN eth0=daemon,,,switch8 eth1=daemon,,,switch7 mem=64M &

# Server

xterm -T MALANG -e linux ubd0=MALANG,jarkom umid=MALANG eth0=daemon,,,switch2 mem=64M &

xterm -T MOJOKERTO -e linux ubd0=MOJOKERTO,jarkom umid=MOJOKERTO eth0=daemon,,,switch1 mem=64M &

# Client

xterm -T SAMPANG -e linux ubd0=SAMPANG,jarkom umid=SAMPANG eth0=daemon,,,switch15 mem=64M &

xterm -T BONDOWOSO -e linux ubd0=BONDOWOSO,jarkom umid=BONDOWOSO eth0=daemon,,,switch14 mem=64M &

xterm -T JEMBER -e linux ubd0=JEMBER,jarkom umid=JEMBER eth0=daemon,,,switch13 mem=64M &

xterm -T BANYUWANGI -e linux ubd0=BANYUWANGI,jarkom umid=BANYUWANGI eth0=daemon,,,switch13 mem=64M &

xterm -T SIDOARJO -e linux ubd0=SIDOARJO,jarkom umid=SIDOARJO eth0=daemon,,,switch11 mem=64M &

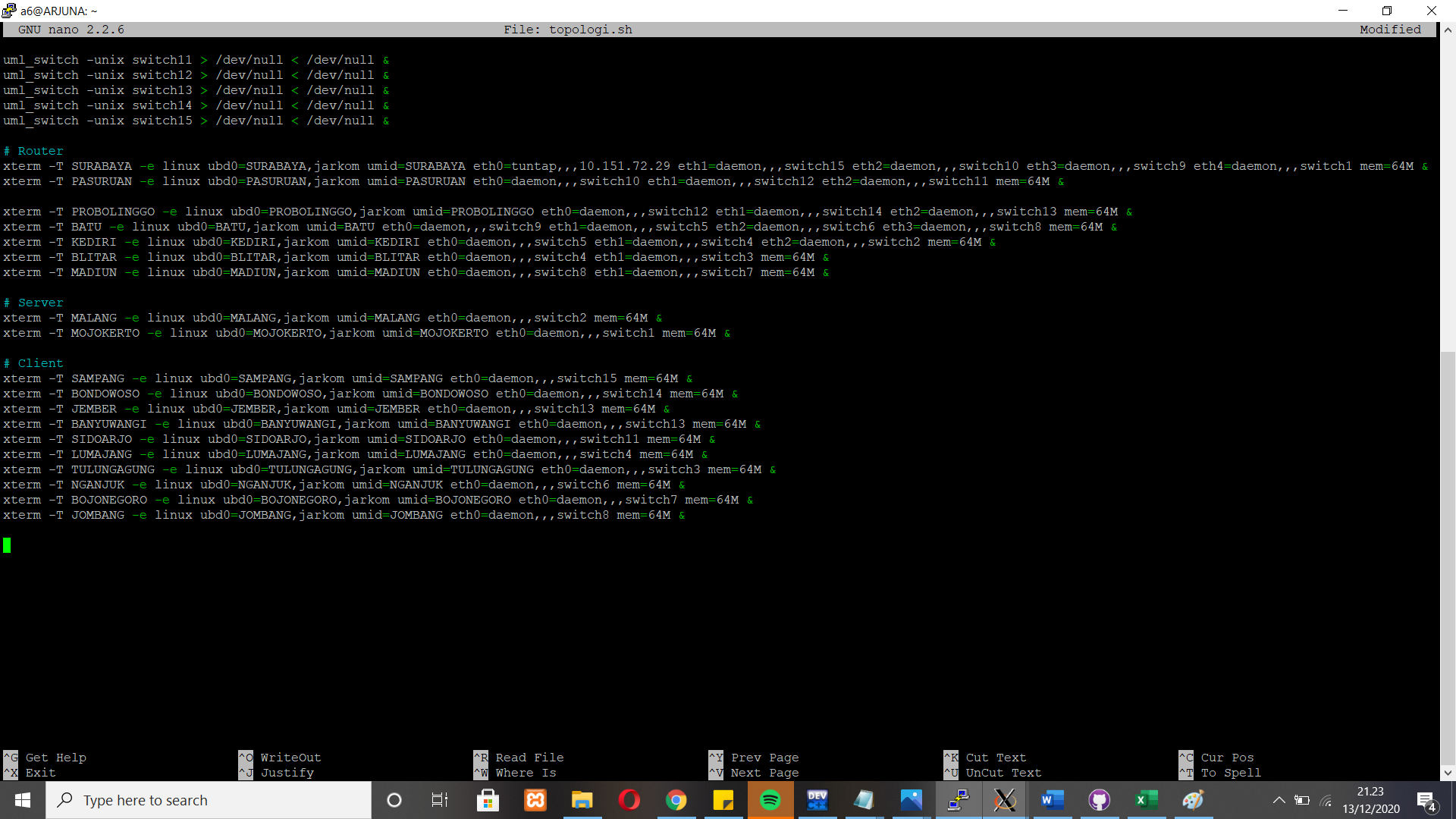
xterm -T LUMAJANG -e linux ubd0=LUMAJANG,jarkom umid=LUMAJANG eth0=daemon,,,switch4 mem=64M &

xterm -T TULUNGAGUNG -e linux ubd0=TULUNGAGUNG,jarkom umid=TULUNGAGUNG eth0=daemon,,,switch3 mem=64M &

xterm -T NGANJUK -e linux ubd0=NGANJUK,jarkom umid=NGANJUK eth0=daemon,,,switch6 mem=64M &

xterm -T BOJONEGORO -e linux ubd0=BOJONEGORO,jarkom umid=BOJONEGORO eth0=daemon,,,switch7 mem=64M &

xterm -T JOMBANG -e linux ubd0=JOMBANG,jarkom umid=JOMBANG eth0=daemon,,,switch8 mem=64M &

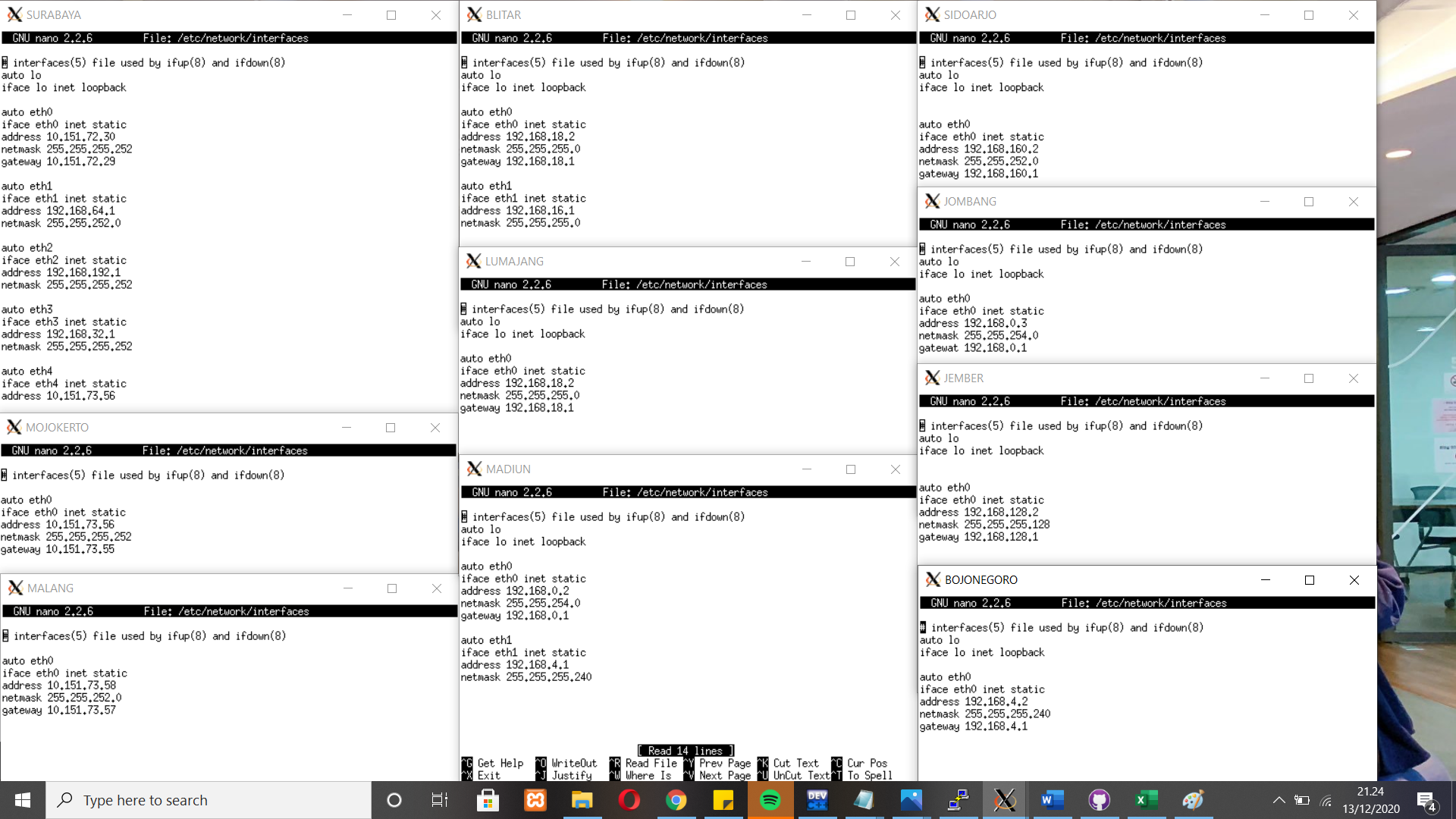


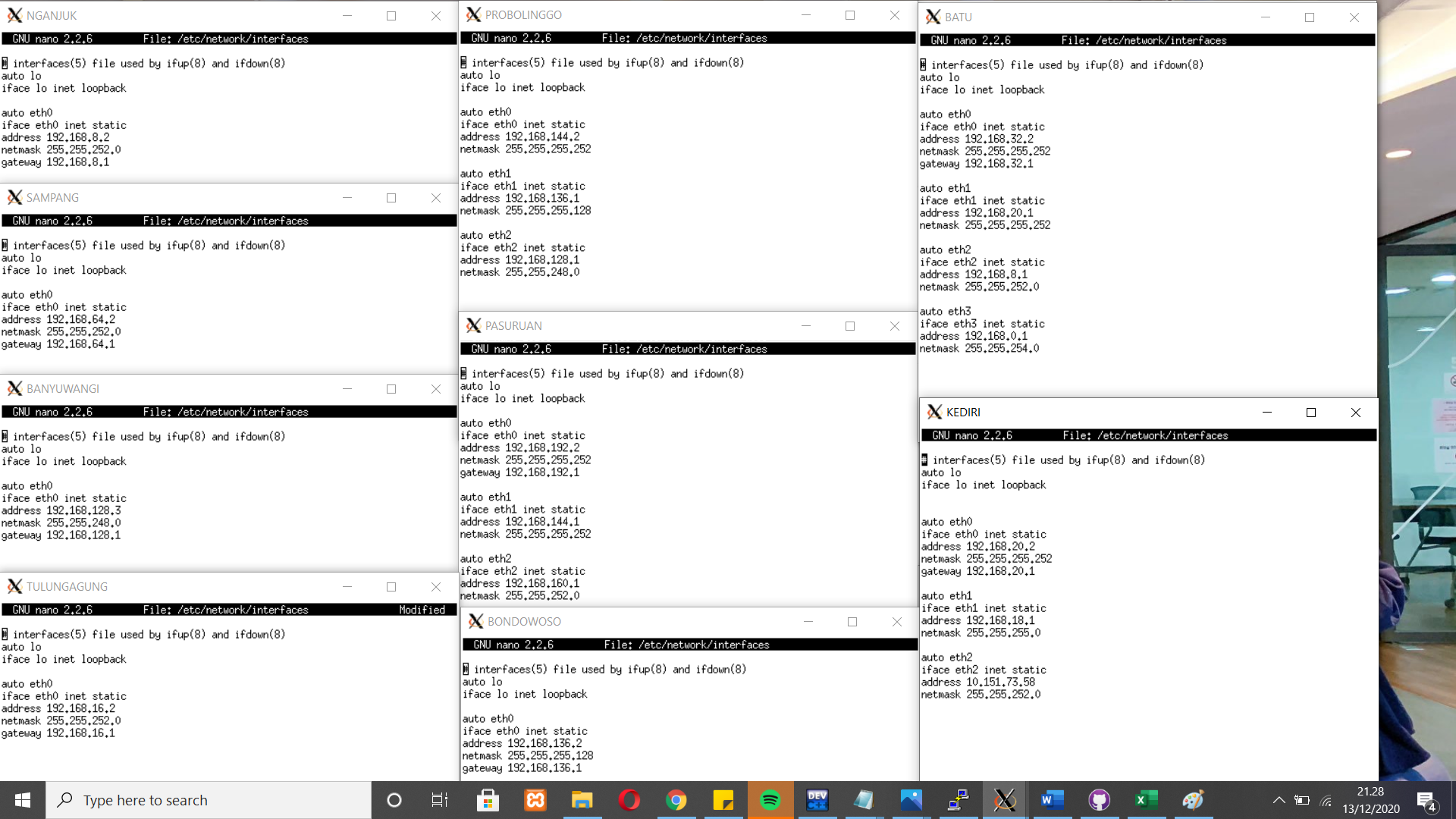
service

* **Pembagian IP**

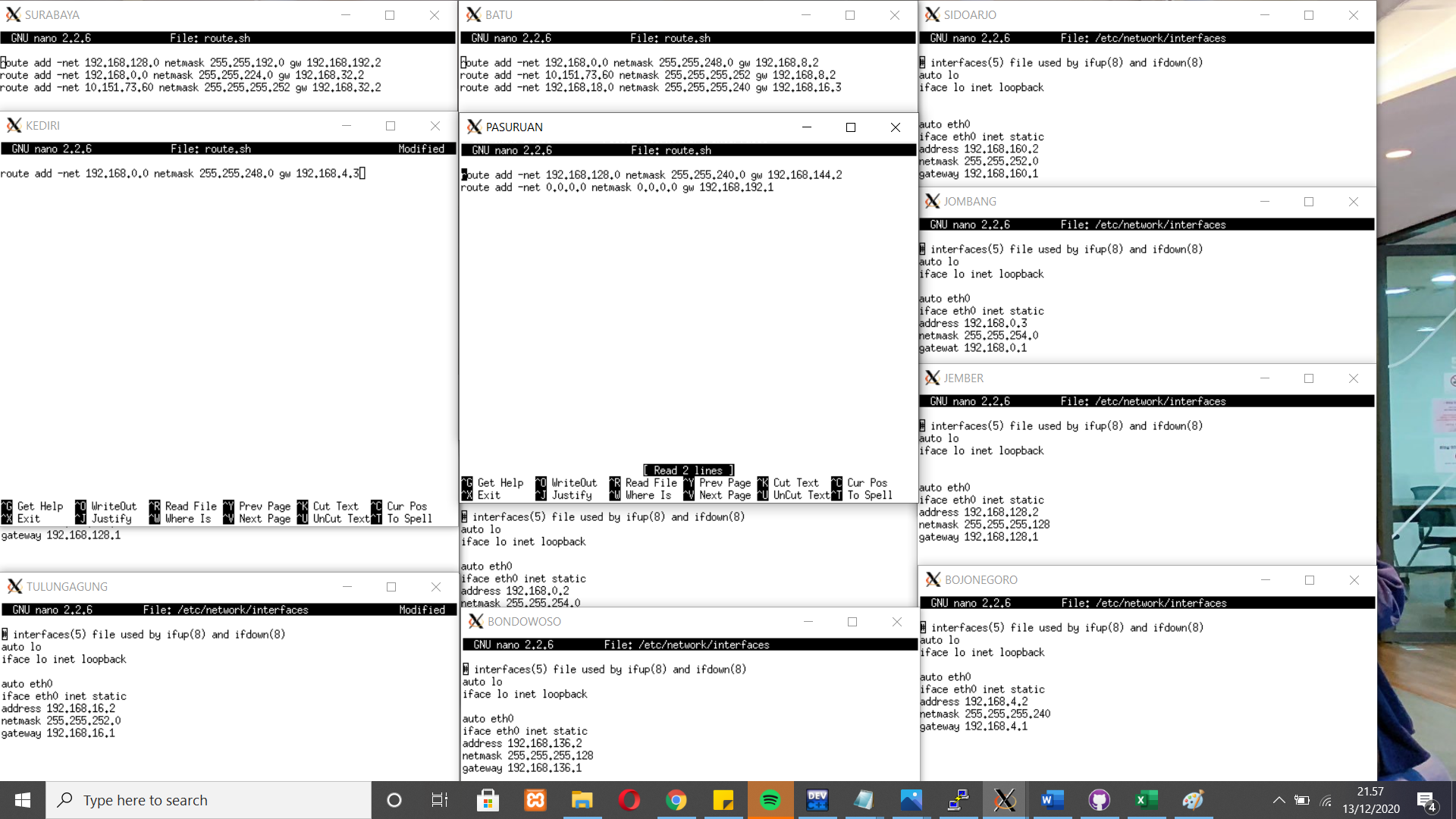
|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| SURABAYA | eth0 |  |  | 10.151.72.30 | 255.255.255.0 | 10.151.72.29 |
| eth1 | A1 | SAMPANG | 192.168.64.1 | 255.255.252.0 |  |
| eth2 | A2 | PASURUAN | 192.168.192.1 | 255.255.255.252 |  |
| eth3 | A6 | BATU | 192.168.32.1 | 255.255.255.252 |  |
| eth4 |  | MOJOKERTO | 10.151.73.56 | 255.255.255.252 |  |
| PASURUAN | eth0 | A2 | SURABAYA | 192.168.192.2 | 255.255.255.252 | 192.168.192.1 |
| eth1 | A3 | PROBOLINGGO | 192.168.144.1 | 255.255.255.252 |  |
| eth2 | A7 | SIDOARJO | 192.168.160.1 | 255.255.252.0 |  |
| PROBOLINGGO | eth0 | A3 | PASURUAN | 192.168.144.2 | 255.255.255.252 | 192.168.144.1 |
| eth1 | A4 | BONDOWOSO | 192.168.136.1 | 255.255.255.128 |  |
| eth2 | A8 | BANYUWANGI - JEMBER | 192.168.128.1 | 255.255.248.0 |  |
| BATU | eth0 | A6 | SURABAYA | 192.168.32.2 | 255.255.255.252 | 192.168.32.1 |
| eth1 | A11 | KEDIRI | 192.168.20.1 | 255.255.255.252 |  |
| eth2 | A10 | NGANJUK | 192.168.8.1 | 255.255.252.0 |  |
| eth3 | A5 | JOMBANG | 192.168.0.1 | 255.255.254.0 |  |
| MADIUN | eth0 | A5 | BATU | 192.168.0.2 | 255.255.254.0 | 192.168.0.1 |
| eth1 | A9 | BOJONEGORO | 192.168.4.1 | 255.255.255.240 |  |
| KEDIRI | eth0 | A11 | BATU | 192.168.20.2 | 255.255.255.252 | 192.168.20.1 |
| eth1 | A13 | LUMAJANG | 192.168.18.1 | 255.255.255.0 |  |
| eth2 |  | MALANG | 10.151.73.58 | 255.255.252.0 |  |
| BLITAR | eth0 | A13 | KEDIRI | 192.168.18.2 | 255.255.255.0 | 192.168.18.1 |
| eth1 | A12 | TULUNGAGUNG | 192.168.16.1 | 255.255.252.0 |  |
| SAMPANG | eth0 | A1 | SURABAYA | 192.168.64.2 | 255.255.252.0 | 192.168.64.1 |
| BONDOWOSO | eth0 | A4 | PROBOLINGGO | 192.168.136.2 | 255.255.255.128 | 192.168.136.1 |
| JEMBER | eth0 | A8 | PROBOLINGGO | 192.168.128.2 | 255.255.248.0 | 192.168.128.1 |
| BANYUWANGI | eth0 | A8 | PROBOLINGGO | 192.168.128.3 | 255.255.248.0 | 192.168.128.1 |
| SIDOARJO | eth0 | A7 | PASURUAN | 192.168.160.2 | 255.255.252.0 | 192.168.160.1 |
| JOMBANG | eth0 | A5 | BATU | 192.168.0.3 | 255.255.254.0 | 192.168.0.1 |
| BOJONEGORO | eth0 | A9 | MADIUN | 192.168.4.2 | 255.255.255.240 | 192.168.4.1 |
| NGANJUK | eth0 | A10 | BATU | 192.168.8.2 | 255.255.252.0 | 192.168.8.1 |
| LUMAJANG | eth0 | A13 | KEDIRI | 192.168.18.2 | 255.255.255.0 | 192.168.18.1 |
| TULUNGAGUNG | eth0 | A12 | BLITAR | 192.168.16.2 | 255.255.252.0 | 192.168.16.1 |
| MOJOKERTO | eth0 |  |  | 10.151.73.56 | 255.255.255.252 | 10.151.73.55 |
| MALANG | eth0 |  |  | 10.151.73.58 | 255.255.252.0 | 10.151.73.57 |

* **Interfaces**





* **Routing**



* **Testing**

**Masih error:(**