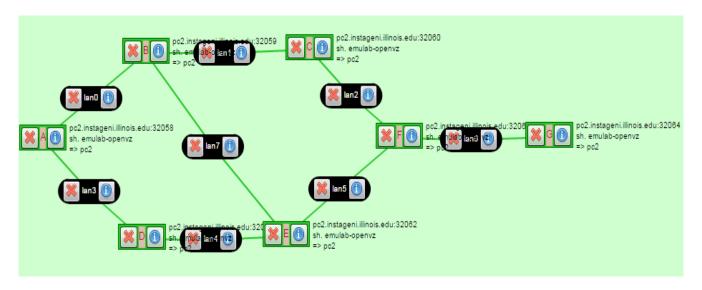
Project: Part 1



1.) IP addresses of all the nodes

| A | A-B | A: 10.10.1.1 B: 10.10.1.2 |
|---|--------------|------------------------------|
| | A – D | A: 10.10.4.1 D: 10.10.4.2 |
| В | B-C | B: 10.10.2.1 C: 10.10.2.2 |
| | В-Е | B: 10.10.8.1 E: 10.10.8.2 |
| С | C – F | C: 10.10.3.1 F: 10.10.3.2 |
| D | D – E | D: 10.10.5.1 E: 10.10.5.2 |
| Е | E-F | E: 10.10.6.1 F: 10.10.6.2 |
| F | F-G | F: 10.10.7.1 G: 10.10.7.2 |

2.) Forwarding tables of all the nodes

Node A:

Kernel IP routing table

| Destination | Gateway | Genmask | Flags | Metric | Ref | Use | Iface |
|-------------|----------------|-----------------|-------|--------|-----|-----|----------|
| 10.10.3.2 | D-lan3 | 255.255.255.254 | UG | 0 | 0 | 0 | eth11237 |
| 10.10.8.2 | D-lan3 | 255.255.255.254 | UG | 0 | 0 | 0 | eth11237 |
| 10.10.4.0 | * | 255.255.255.0 | U | 0 | 0 | 0 | eth11237 |
| 10.10.1.0 | * | 255.255.255.0 | U | 0 | 0 | 0 | eth11232 |
| 72.36.65.0 | * | 255.255.255.0 | U | 0 | 0 | 0 | eth999 |
| 10.10.0.0 | B-lan0 | 255.255.252.0 | UG | 0 | 0 | 0 | eth11232 |
| 10.10.8.0 | B-lan0 | 255.255.248.0 | UG | 0 | 0 | 0 | eth11232 |
| 172.16.0.0 | * | 255.240.0.0 | U | 0 | 0 | 0 | eth999 |
| 10.0.0.0 | D-lan3 | 255.0.0.0 | UG | 0 | 0 | 0 | eth11237 |
| default | pc2.instageni. | i 0.0.0.0 | UG | 0 | 0 | 0 | eth999 |

Node B:

| Kernel IP | routing | table |
|-----------|---------|-------|
|-----------|---------|-------|

| | \mathcal{C} | | | | | | |
|-------------|-----------------|-----------------|-------|--------|-----|-----|----------|
| Destination | Gateway | Genmask | Flags | Metric | Ref | Use | Iface |
| 10.10.3.0 | C-lan1 | 255.255.255.254 | UG | 0 | 0 | 0 | eth11233 |
| 10.10.4.0 | A-lan0 | 255.255.255.254 | UG | 0 | 0 | 0 | eth11232 |
| 10.10.2.0 | * | 255.255.255.0 | U | 0 | 0 | 0 | eth11233 |
| 10.10.1.0 | * | 255.255.255.0 | U | 0 | 0 | 0 | eth11232 |
| 10.10.8.0 | * | 255.255.255.0 | U | 0 | 0 | 0 | eth11235 |
| 72.36.65.0 | * | 255.255.255.0 | U | 0 | 0 | 0 | eth999 |
| 172.16.0.0 | * | 255.240.0.0 | U | 0 | 0 | 0 | eth999 |
| 10.0.0.0 | E-lan7 | 255.0.0.0 | UG | 0 | 0 | 0 | eth11235 |
| default | pc2.instageni.i | 0.0.0.0 | UG | 0 | 0 | 0 | eth999 |

Node C:

| V | arnal | ID | routing table | |
|---|-------|----|---------------|--|
| ĸ | ernei | I٢ | routing table | |

| recifici ii fout | rement touting more | | | | | | |
|------------------|---------------------|-----------------|-------|--------|-----|-----|----------|
| Destination | Gateway | Genmask | Flags | Metric | Ref | Use | Iface |
| 10.10.6.2 | F-lan2 | 255.255.255.254 | UG | 0 | 0 | 0 | eth11231 |
| 10.10.6.0 | B-lan1 | 255.255.255.0 | UG | 0 | 0 | 0 | eth11233 |
| 10.10.2.0 | * | 255.255.255.0 | U | 0 | 0 | 0 | eth11233 |
| 10.10.3.0 | * | 255.255.255.0 | U | 0 | 0 | 0 | eth11231 |
| 72.36.65.0 | * | 255.255.255.0 | U | 0 | 0 | 0 | eth999 |
| 10.10.6.0 | F-lan2 | 255.255.254.0 | UG | 0 | 0 | 0 | eth11231 |
| 172.16.0.0 | * | 255.240.0.0 | U | 0 | 0 | 0 | eth999 |
| 10.0.0.0 | B-lan1 | 255.0.0.0 | UG | 0 | 0 | 0 | eth11233 |
| default | pc2.instageni.i | 0.0.0.0 | UG | 0 | 0 | 0 | eth999 |

Node D:

| • |
|---|
| |

| Destination | Gateway | Genmask | Flags | Metric | Ref | Use | Iface |
|-------------|---------|-----------------|-------|--------|-----|-----|----------|
| 10.10.1.0 | A-lan3 | 255.255.255.254 | UG | 0 | 0 | 0 | eth11237 |
| 10.10.4.0 | * | 255.255.255.0 | U | 0 | 0 | 0 | eth11237 |
| 10.10.5.0 | * | 255.255.255.0 | U | 0 | 0 | 0 | eth11230 |
| 72.36.65.0 | * | 255.255.255.0 | U | 0 | 0 | 0 | eth999 |
| 172.16.0.0 | * | 255.240.0.0 | U | 0 | 0 | 0 | eth999 |

| 10.0.0.0 | E-lan4 | 255.0.0.0 | UG | 0 | 0 | 0 | eth11230 | | | |
|--|---|---|--|---|---|--------------------------------------|--|--|--|--|
| default | pc2.instageni.i | | UG | 0 | 0 | 0 | eth999 | | | |
| | r | | | - | - | | | | | |
| Node E: | | | | | | | | | | |
| Kernel IP rou | iting table | | | | | | | | | |
| Destination | Gateway | Genmask | Flags | Metri | e Ref | Use | Iface | | | |
| 10.10.3.2 | F-lan5 | 255.255.255.254 | UG | 0 | 0 | 0 | eth11234 | | | |
| 10.10.4.2 | D-lan4 | 255.255.255.254 | UG | 0 | 0 | 0 | eth11230 | | | |
| 10.10.6.0 | * | 255.255.255.0 | U | 0 | 0 | 0 | eth11234 | | | |
| 10.10.5.0 | * | 255.255.255.0 | U | 0 | 0 | 0 | eth11230 | | | |
| 10.10.8.0 | * | 255.255.255.0 | U | 0 | 0 | 0 | eth11235 | | | |
| 72.36.65.0 | * | 255.255.255.0 | U | 0 | 0 | 0 | eth999 | | | |
| 10.10.4.0 | B-lan7 | 255.255.254.0 | UG | 0 | 0 | 0 | eth11235 | | | |
| 10.10.4.0 | F-lan5 | 255.255.252.0 | UG | 0 | 0 | 0 | eth11234 | | | |
| 172.16.0.0 | * | 255.240.0.0 | U | 0 | 0 | 0 | eth999 | | | |
| 10.0.0.0 | B-lan7 | 255.0.0.0 | UG | 0 | 0 | 0 | eth11235 | | | |
| default | pc2.instageni.i | | UG | 0 | 0 | 0 | eth999 | | | |
| Node F: | | | | | | | | | | |
| Kernel IP rou | iting table | | | | | | | | | |
| Destination | Gateway | Genmask | Flags | s Metric | Ref | Use | Iface | | | |
| 10.10.8.0 | C-lan2 | 255.255.255.254 | UG | 0 | 0 | 0 | a4l-11221 | | | |
| 10.10.1.2 | G 1 0 | | \sim \sim | U | U | U | em11231 | | | |
| | C-lan2 | | UG | 0 | 0 | 0 | eth11231 eth11231 | | | |
| 10.10.6.0 | C-lan2 * | 255.255.255.254 | UG | 0 | 0 | 0 | eth11231 | | | |
| 10.10.6.0 10.10.7.0 | | 255.255.255.254 255.255.255.0 | UG U | $\begin{array}{c} 0 \\ 0 \end{array}$ | 0 0 | $0 \\ 0$ | eth11231 eth11234 | | | |
| 10.10.7.0 | * | 255.255.255.254 255.255.255.0 255.255.255.0 | UG U U | 0 0 0 | 0 0 0 | 0 0 0 | eth11231 eth11234 eth11236 | | | |
| 10.10.7.0 10.10.3.0 | * | 255.255.255.254 255.255.255.0 255.255.255.0 255.255.255.0 | UG U U U | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 | eth11231 eth11234 eth11236 eth11231 | | | |
| 10.10.7.0 10.10.3.0 72.36.65.0 | * * * | 255.255.255.254 255.255.255.0 255.255.255.0 255.255.255.0 255.255.255.0 | UG U U U U | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 | eth11231 eth11234 eth11236 eth11231 eth999 | | | |
| 10.10.7.0 10.10.3.0 72.36.65.0 10.10.0.0 | * * * E-lan5 | 255.255.255.254 255.255.255.0 255.255.255.0 255.255.255.0 255.255.255.0 255.255.254.0 | UG U U U U UG | 0 0 0 0 0 | 0 0 0 0 0 | 0 0 0 0 0 | eth11231 eth11234 eth11236 eth11231 eth999 eth11234 | | | |
| 10.10.7.0 10.10.3.0 72.36.65.0 10.10.0.0 10.10.0.0 | * * * | 255.255.255.254 255.255.255.0 255.255.255.0 255.255.255.0 255.255.255.0 255.255.254.0 255.255.252.0 | UG U U U U UG UG | 0 0 0 0 0 0 | 0 0 0 0 0 0 | 0 0 0 0 0 0 | eth11231 eth11234 eth11236 eth11231 eth999 eth11234 eth11231 | | | |
| 10.10.7.0 10.10.3.0 72.36.65.0 10.10.0.0 10.10.0.0 172.16.0.0 | * * E-lan5 C-lan2 * | 255.255.255.254 255.255.255.0 255.255.255.0 255.255.255.0 255.255.255.0 255.255.254.0 255.255.252.0 255.240.0.0 | UG U U U U UG UG UG | 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 | eth11231 eth11234 eth11236 eth11231 eth999 eth11234 eth11231 eth999 | | | |
| 10.10.7.0 10.10.3.0 72.36.65.0 10.10.0.0 10.10.0.0 172.16.0.0 10.0.0.0 | * * E-lan5 C-lan2 * E-lan5 | 255.255.255.254 255.255.255.0 255.255.255.0 255.255.255.0 255.255.255.0 255.255.254.0 255.255.252.0 255.240.0.0 255.0.0.0 | UG U U U U U UG UG UG UG | 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0 | eth11231 eth11234 eth11236 eth11231 eth999 eth11234 eth999 eth11234 | | | |
| 10.10.7.0 10.10.3.0 72.36.65.0 10.10.0.0 10.10.0.0 172.16.0.0 | * * E-lan5 C-lan2 * | 255.255.255.254 255.255.255.0 255.255.255.0 255.255.255.0 255.255.255.0 255.255.254.0 255.255.252.0 255.240.0.0 255.0.0.0 | UG U U U U UG UG UG | 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 | eth11231 eth11234 eth11236 eth11231 eth999 eth11234 eth11231 eth999 | | | |
| 10.10.7.0 10.10.3.0 72.36.65.0 10.10.0.0 10.10.0.0 172.16.0.0 10.0.0.0 | * * E-lan5 C-lan2 * E-lan5 | 255.255.255.254 255.255.255.0 255.255.255.0 255.255.255.0 255.255.255.0 255.255.254.0 255.255.252.0 255.240.0.0 255.0.0.0 | UG U U U U U UG UG UG UG | 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0 | eth11231 eth11234 eth11236 eth11231 eth999 eth11234 eth999 eth11234 | | | |
| 10.10.7.0 10.10.3.0 72.36.65.0 10.10.0.0 10.10.0.0 172.16.0.0 10.0.0.0 default Node G: | * * E-lan5 C-lan2 * E-lan5 pc2.instageni.i | 255.255.255.254 255.255.255.0 255.255.255.0 255.255.255.0 255.255.255.0 255.255.254.0 255.255.252.0 255.240.0.0 255.0.0.0 | UG U U U U UG UG UG UG UG | 0 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0 | eth11231 eth11234 eth11236 eth11231 eth999 eth11234 eth999 eth11234 eth999 | | | |
| 10.10.7.0 10.10.3.0 72.36.65.0 10.10.0.0 10.10.0.0 172.16.0.0 10.0.0.0 default | * * E-lan5 C-lan2 * E-lan5 pc2.instageni.i | 255.255.255.254 255.255.255.0 255.255.255.0 255.255.255.0 255.255.255.0 255.255.254.0 255.255.252.0 255.240.0.0 255.0.0.0 | UG U U U U UG UG UG UG UG | 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0 | eth11231 eth11234 eth11236 eth11231 eth999 eth11234 eth999 eth11234 | | | |

| Kernel IP routing table | | | | | | | |
|-------------------------|-----------------|---------------|-------|--------|-----|-----|----------|
| Destination | Gateway | Genmask | Flags | Metric | Ref | Use | Iface |
| 10.10.7.0 | * | 255.255.255.0 | U | 0 | 0 | 0 | eth11236 |
| 72.36.65.0 | * | 255.255.255.0 | U | 0 | 0 | 0 | eth999 |
| 172.16.0.0 | * | 255.240.0.0 | U | 0 | 0 | 0 | eth999 |
| 10.0.0.0 | F-lan6 | 255.0.0.0 | UG | 0 | 0 | 0 | eth11236 |
| default | pc2.instageni.i | 0.0.0.0 | UG | 0 | 0 | 0 | eth999 |
| | | | | | | | |