

**Subnet Troubleshooting Game**  
**(Tugas Mata Kuliah Jaringan Komputer)**



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**Kelas: SK 5 C**

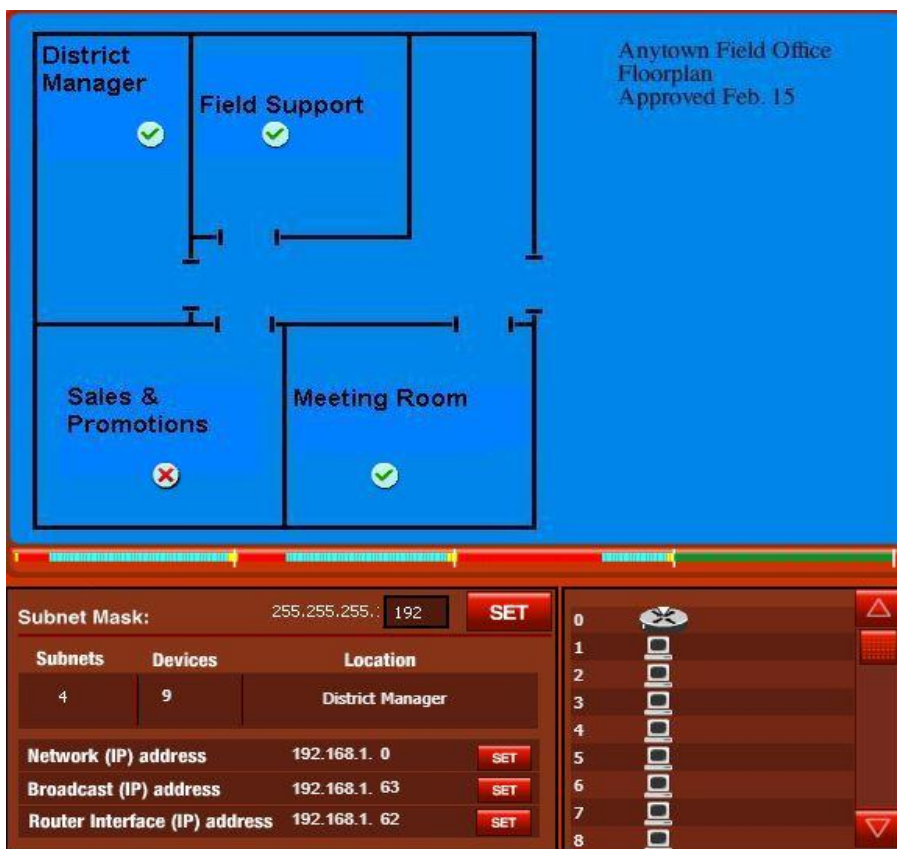
**Jurusan Sistem Komputer**  
**Fakultas Ilmu Komputer Universitas Sriwijaya**  
**2017**

## LEVEL 1

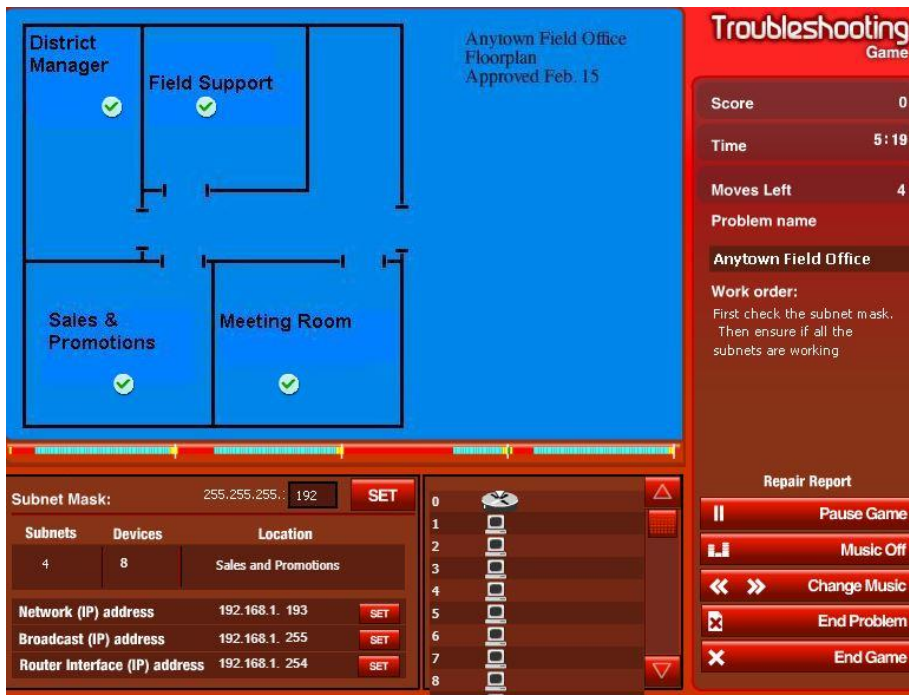
Pada level ini, terdapat tiga buah kasus seperti gambar dibawah ini :



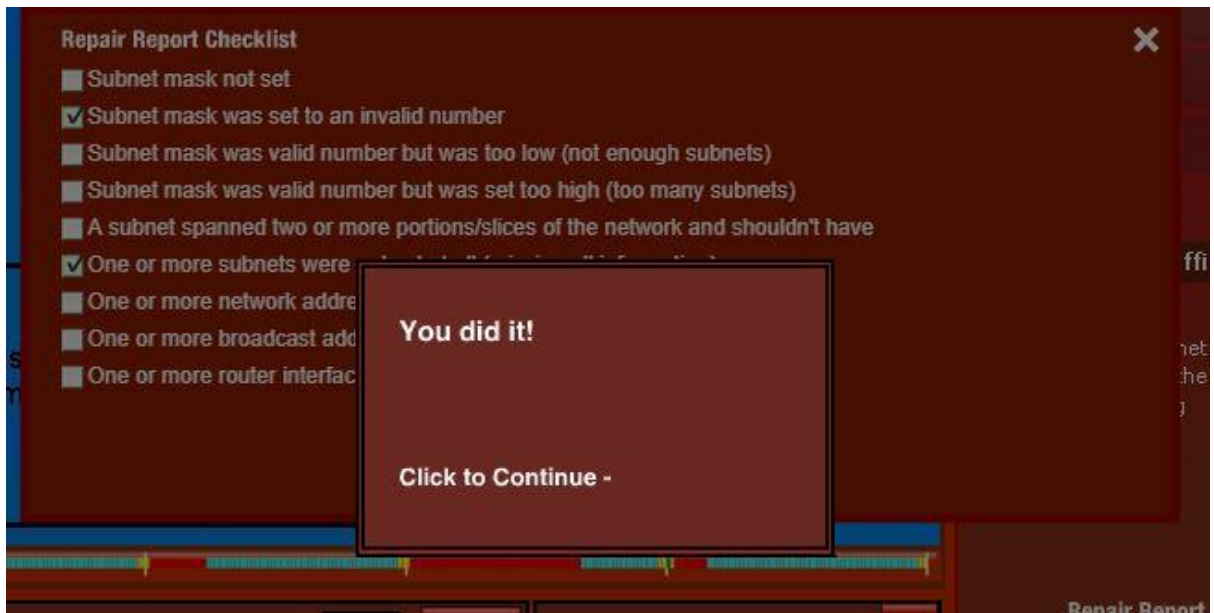
Pertama pada Distrik Manager , subnet yang di set adalah 255.255.255.192 hal ini dilihat dari network IP yang tersedia yaitu 192.168.1.0 dengan broadcast 192.168.1.63 dan host terakhirnya adalah 192.168.1.62



Pada bagian sales and promotion, lengkapi data IP yang kurang dengan perhitungan subnet mask tersebut.



Setelah itu ceklist pada bagian repair report apa saja yang sudah dibuat



Kasus Kedua permasalahan yang diberikan tidak jauh berbeda dan harus menebak berapa subnetnya seperti kasus 1

Field Support Division ✓

Lunch Area ✓

District Manager ✗

On-Site Warehouse ✗

Subnet Mask: 255.255.255.192 SET

Subnets	Devices	Location
4	12	Lunch Area

Network (IP) address 192.168.1.64 SET

Broadcast (IP) address 192.168.1.127 SET

Router Interface (IP) address 192.168.1.126 SET

0 [Router Icon] [Up Arrow]

1 [Router Icon]

2 [Router Icon]

3 [Router Icon]

4 [Router Icon]

5 OPEN

6 OPEN

7 OPEN

8 OPEN [Down Arrow]

District manager :

Field Support Division ✓

Lunch Area ✓

District Manager ✓

On-Site Warehouse ✗

Subnet Mask: 255.255.255.192 SET

Subnets	Devices	Location
4	0	District Manager

Network (IP) address 192.168.1.193 SET

Broadcast (IP) address 192.168.1.255 SET

Router Interface (IP) address 192.168.1.254 SET

0 [Router Icon] [Up Arrow]

1 [Router Icon]

2 [Router Icon]

3 [Router Icon]

4 [Router Icon]

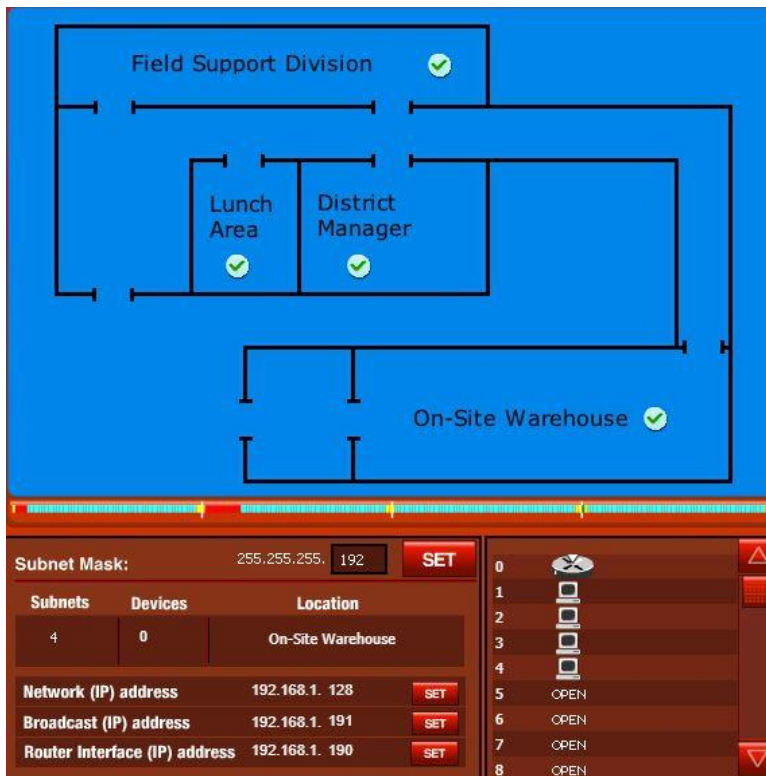
5 OPEN

6 OPEN

7 OPEN

8 OPEN [Down Arrow]

On-Site Warehouse :



Repair Report :

Repair Report Checklist

- Subnet mask not set
- Subnet mask was set to an invalid number
- Subnet mask was valid number but was too low (not enough subnets)
- Subnet mask was valid number but was set too high (too many subnets)
- A subnet spanned two or more portions/slices of the network and shouldn't have
- One or more subnets were not set at all (missing all information)
- One or more network addresses were missing or set to an incorrect value
- One or more broadcast addresses were missing or set to an incorrect value
- One or more router interfaces were missing or set to an incorrect value

**You did it!**

Click to Continue -

Kasus 3 :

Metropolis Field Offices: Floorplan as of April 16

Subnet Mask: 255.255.255. 224 **SET**

Subnets	Devices	Location
8	4	District Manager

Network (IP) address 192.168.1. 0 **SET**  
 Broadcast (IP) address 192.168.1. 31 **SET**  
 Router Interface (IP) address 192.168.1. 30 **SET**

0 **▲**  
 1   
 2   
 3   
 4   
 5 OPEN  
 6 OPEN  
 7 OPEN  
 8 OPEN **▼**

Sales Support :

Metropolis Field Offices: Floorplan as of April 16

Subnet Mask: 255.255.255. 224 **SET**

Subnets	Devices	Location
8	0	Sales Support Staff

Network (IP) address 192.168.1. 192 **SET**  
 Broadcast (IP) address 192.168.1. 223 **SET**  
 Router Interface (IP) address 192.168.1. 222 **SET**

0 **▲**  
 1   
 2   
 3   
 4   
 5 OPEN  
 6 OPEN  
 7 OPEN  
 8 OPEN **▼**

On-Site Storage :

Metropolis Field Offices: Floorplan as of April 16

Subnet Mask: 255.255.255.224 SET

Subnets	Devices	Location
8	0	On-Site Storage

Network (IP) address 192.168.1.224 SET  
 Broadcast (IP) address 192.168.1.255 SET  
 Router Interface (IP) address 192.168.1.254 SET

0 [Icon]  
 1 [Icon]  
 2 [Icon]  
 3 [Icon]  
 4 [Icon]  
 5 OPEN  
 6 OPEN  
 7 OPEN  
 8 OPEN

Local IT :

Metropolis Field Offices: Floorplan as of April 16

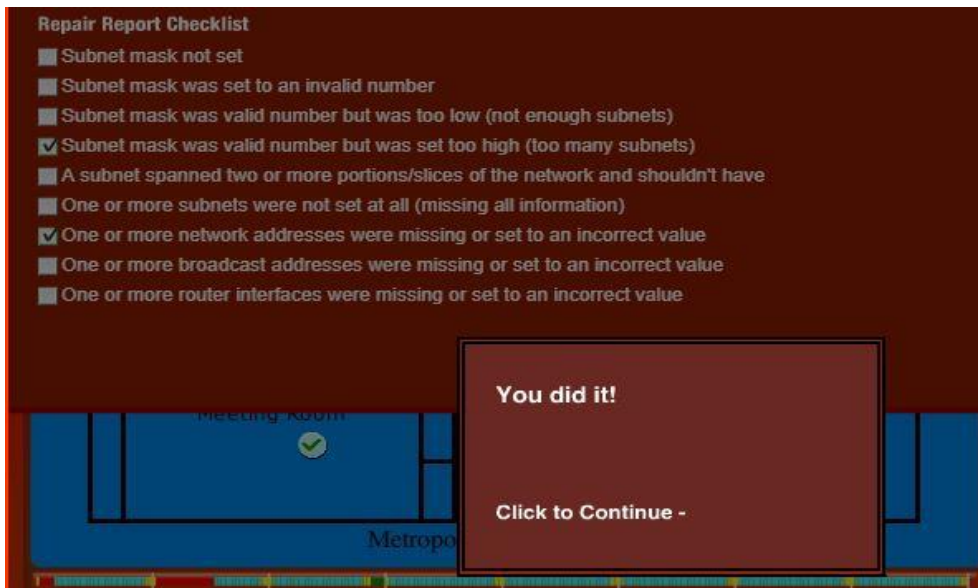
Subnet Mask: 255.255.255.224 SET

Subnets	Devices	Location
8	0	Local IT

Network (IP) address 192.168.1.128 SET  
 Broadcast (IP) address 192.168.1.159 SET  
 Router Interface (IP) address 192.168.1.158 SET

0 [Icon]  
 1 [Icon]  
 2 [Icon]  
 3 [Icon]  
 4 [Icon]  
 5 OPEN  
 6 OPEN  
 7 OPEN  
 8 OPEN

Repair Report :



## LEVEL 2

Level 2 Kasus 1

Dock 1

Shipping & Receiving Floorplan  
Approved September 5

Subnets	Devices	Location
4	4	Dock 1

Subnet Mask: 255.255.255.192 **SET**

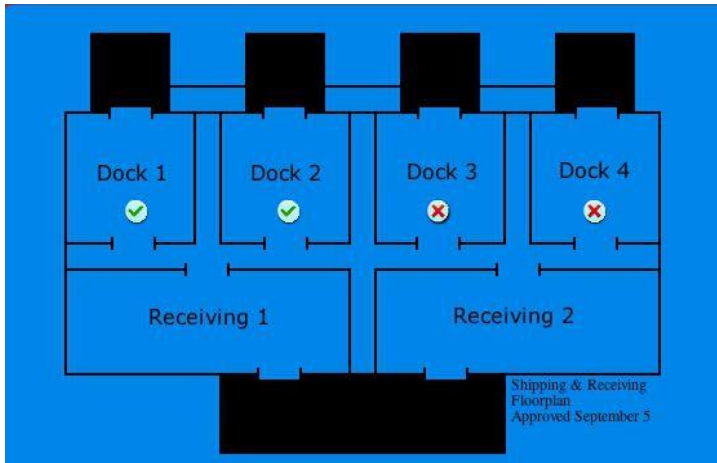
Network (IP) address 192.168.1.0 **SET**

Broadcast (IP) address 192.168.1.63 **SET**

Router Interface (IP) address 192.168.1.62 **SET**

Dock 2





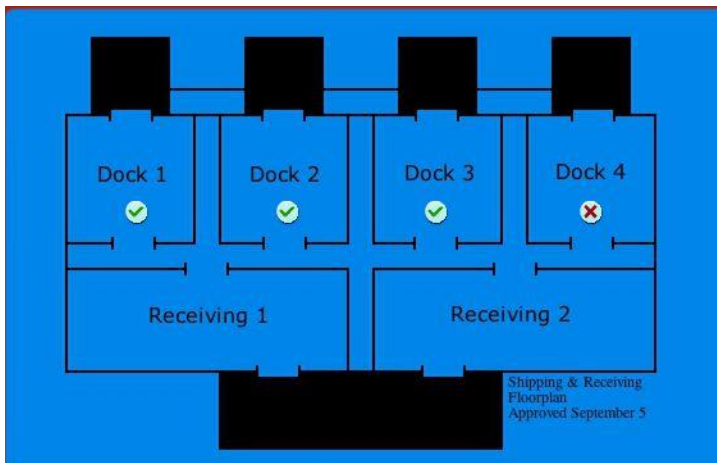
Subnet Mask: 255.255.255.192 **SET**

Subnets	Devices	Location
4	4	Dock 2

Network (IP) address 192.168.1.64 **SET**  
 Broadcast (IP) address 192.168.1.127 **SET**  
 Router Interface (IP) address 192.168.1.126 **SET**

0 **SET**  
 1 **SET**  
 2 **SET**  
 3 **SET**  
 4 **SET**  
 5 OPEN  
 6 OPEN  
 7 OPEN  
 8 OPEN

Dock 3



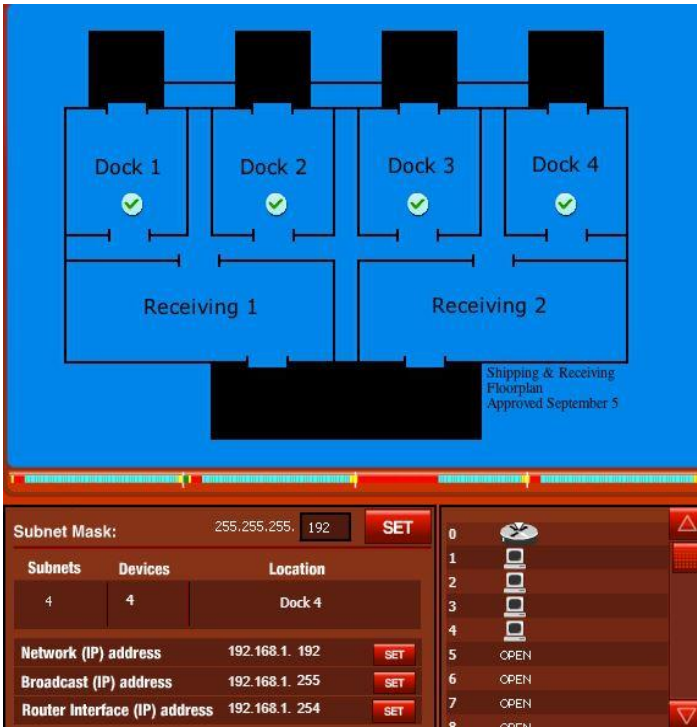
Subnet Mask: 255.255.255.192 **SET**

Subnets	Devices	Location
4	30	Dock 3

Network (IP) address 192.168.1.128 **SET**  
 Broadcast (IP) address 192.168.1.191 **SET**  
 Router Interface (IP) address 192.168.1.190 **SET**

0 **SET**  
 1 **SET**  
 2 **SET**  
 3 **SET**  
 4 **SET**  
 5 OPEN  
 6 OPEN  
 7 OPEN  
 8 OPEN

Dock 4 :



Repair Report :

**Repair Report Checklist**

**You did it!**

Click to Continue -

- Subnet mask n
- Subnet mask w
- Subnet mask w
- Subnet mask w
- A subnet spann
- One or more su
- One or more ne
- One or more br
- One or more router interfaces were missing or set to an incorrect value

Level 2 kasus 2 :

Call Center Training :

Call Center Floor Plan Approved October 30

Subnet Mask: 255.255.255.192 SET

Subnets	Devices	Location
4	10	Call Center Training

Network (IP) address 192.168.1.64 SET

Broadcast (IP) address 192.168.1.127 SET

Router Interface (IP) address 192.168.1.126 SET

Entrance and Management :

Call Center Floor Plan Approved October 30

Subnet Mask: 255.255.255.192 SET

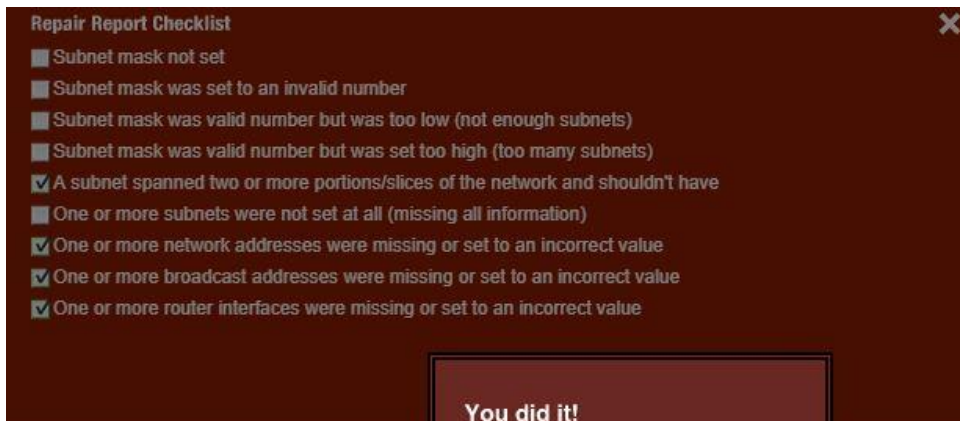
Subnets	Devices	Location
4	24	Entrance and Management

Network (IP) address 192.168.1.192 SET

Broadcast (IP) address 192.168.1.255 SET

Router Interface (IP) address 192.168.1.254 SET

Repair report :



Level 2 kasus 3 :

Cog Manufacturing:

**Troubleshooting Game**

Score: 3200  
Time: 15:04  
Moves Left: 8  
Problem name: Manufacturing  
Work order: Subnets must be distinct.  
Please keep this to eight (8) subnets

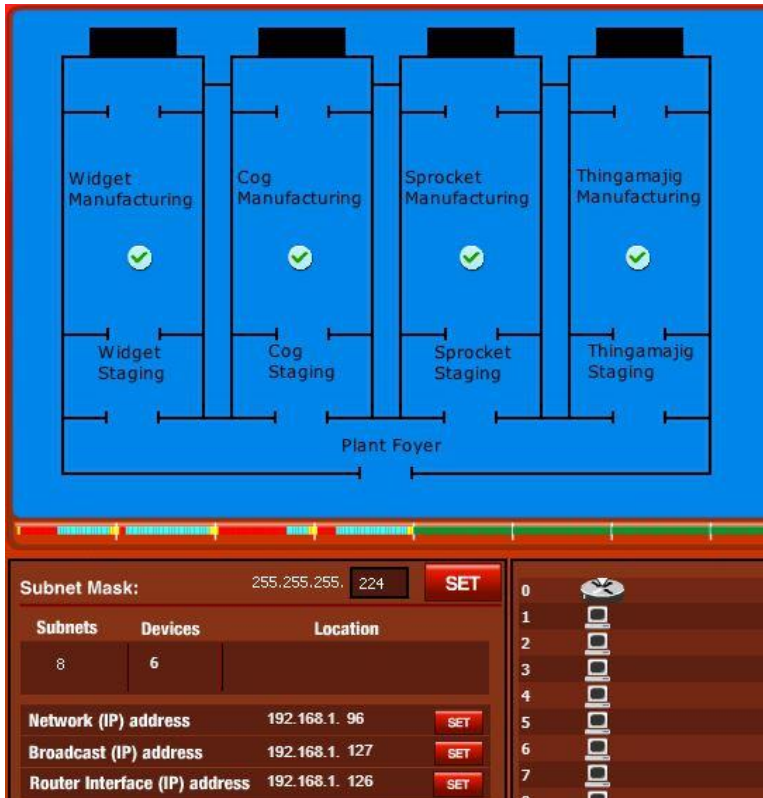
**Repair Report**

Subnet Mask:	255.255.255.	224	SET
Subnets	Devices	Location	
8	22		
Network (IP) address	192.168.1.	64	SET
Broadcast (IP) address	192.168.1.	95	SET
Router Interface (IP) address	192.168.1.	94	SET

Control Panel:  
 0: [Router Icon]  
 1: [Router Icon]  
 2: [Router Icon]  
 3: [Router Icon]  
 4: [Router Icon]  
 5: [Router Icon]  
 6: [Router Icon]  
 7: [Router Icon]  
 8: [Router Icon]

Buttons:  
 Pause Game  
 Music Off  
 Change Music  
 End Problem  
 End Game

Sprocket Manufacturing :



Repair report :

**Repair Report Checklist**

- Subnet mask not set
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- One or more broadcast addresses were missing or set to an incorrect value
- One or more router interfaces were missing or set to an incorrect value

**You did it!**

Click to Continue -

Kasus 4 :

Machine Shop (Kurang langkah) :

Research and Development Floorplan: Approved June 25

Subnet Mask: 255.255.255.224 SET

Subnets	Devices	Location
0	4	

Network (IP) address 192.168.1.0 SET  
 Broadcast (IP) address 192.168.1.31 SET  
 Router Interface (IP) address 192.168.1.30 SET

0 [Router Icon] [Red X]  
 1 [PC Icon]  
 2 [PC Icon]  
 3 [PC Icon]  
 4 [PC Icon]  
 5 OPEN  
 6 OPEN  
 7 OPEN  
 8 OPEN

Product Development :

Research and Development Floorplan: Approved June 25

Subnet Mask: 255.255.255.224 SET

Subnets	Devices	Location
0	4	

Network (IP) address 192.168.1.32 SET  
 Broadcast (IP) address 192.168.1.63 SET  
 Router Interface (IP) address 192.168.1.62 SET

0 [Router Icon] [Red X]  
 1 [PC Icon]  
 2 [PC Icon]  
 3 [PC Icon]  
 4 [PC Icon]  
 5 OPEN  
 6 OPEN  
 7 OPEN  
 8 OPEN

Safety :

Research and Development Floorplan: Approved June 25

Subnet Mask: 255.255.255.224 **SET**

Subnets	Devices	Location
0	4	

Network (IP) address 192.168.1.64 **SET**  
 Broadcast (IP) address 192.168.1.95 **SET**  
 Router interface (IP) address 192.168.1.94 **SET**

0   
 1   
 2   
 3   
 4   
 5 OPEN  
 6 OPEN  
 7 OPEN  
 8 OPEN

Library :

Research and Development Floorplan: Approved June 25

Subnet Mask: 255.255.255.224 **SET**

Subnets	Devices	Location
0	4	

Network (IP) address 192.168.1.96 **SET**  
 Broadcast (IP) address 192.168.1.127 **SET**  
 Router interface (IP) address 192.168.1.126 **SET**

0   
 1   
 2   
 3   
 4   
 5 OPEN  
 6 OPEN  
 7 OPEN  
 8 OPEN

Drafting :

