LAPORAN TUGAS BESAR JARINGAN KOMPUTER

Desain Jaringan untuk Menghubungkan Lima Departemen di Dua Lantai

Laporan ini diajukan untuk memenuhi tugas besar mata kuliah Jaringan Komputer yang diampu Bapak Tanzilal Mustaqim, S.Kom, M.Kom.

disusun oleh:

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PROGRAM STUDI INFORMATIKA

FAKULTAS TEKNOLOGI INFORMASI DAN BISNIS

INSTITUT TEKNOLOGI TELKOM SURABAYA

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Subneting

IP: 192.168.16.0/26
Subnetmask: 11111111.11111111.11111111.11000000
  : 255.255.255.192
Subnet: $2^2 = 4$
Host: $2^6 - 2 = 62$
Blok subnetmask: 256 – 192 = 64
0 64 128 192 256

NETWORK	192.168.16.0	192.168.16.64	192.168.16.128	192.168.16.192
IP AWAL	192.168.16.1	192.168.16.65	192.168.16.129	192.168.16.193
IP AKHIR	192.168.16.62	192.168.16.126	192.168.16.190	192.168.16.254
BROADCAST	192.168.16.63	192.168.16.127	192.168.16.191	192.168.16.255

Lantai 1

- Akuntansi

Device	IP	Subnetmask	Gateway
Server	192.168.16.7	255.255.255.192	192.168.16.1
PC	192.168.16.2	255.255.255.192	192.168.16.1
PC	192.168.16.3	255.255.255.192	192.168.16.1
Smartphone 1	192.168.16.5	255.255.255.192	192.168.16.1
Smartphone 2	192.168.16.6	255.255.255.192	192.168.16.1
Printer	192.168.16.4	255.255.255.192	192.168.16.1

- Pengiriman

Device	IP	Subnetmask	Gateway
PC	192.168.16.56	255.255.255.192	192.168.16.65
PC	192.168.16.57	255.255.255.192	192.168.16.65
Smartphone 1	192.168.16.69	255.255.255.192	192.168.16.65
Smartphone 2	192.168.16.70	255.255.255.192	192.168.16.65
Printer	192.168.16.68	255.255.255.192	192.168.16.65

Lantai 2

- Pemasaran

Device	IP	Subnetmask	Gateway
PC	192.168.16.144	255.255.255.192	192.168.16.129
PC	192.168.16.130	255.255.255.192	192.168.16.129
Smartphone 1	192.168.16.142	255.255.255.192	192.168.16.129

Smartphone 2	192.168.16.143	255.255.255.192	192.168.16.129
Printer	192.168.16.141	255.255.255.192	192.168.16.129

- SDM

Device	IP	Subnetmask	Gateway
PC	192.168.16.194	255.255.255.192	192.168.16.193
PC	192.168.16.201	255.255.255.192	192.168.16.193
Smartphone 1	192.168.16.204	255.255.255.192	192.168.16.193
Smartphone 2	192.168.16.203	255.255.255.192	192.168.16.193
Printer	192.168.16.202	255.255.255.192	192.168.16.193

- TI

Device	IP	Subnetmask	Gateway
PC	192.168.16.232	255.255.255.192	192.168.16.193
PC	192.168.16.233	255.255.255.192	192.168.16.193
Smartphone 1	192.168.16.235	255.255.255.192	192.168.16.193
Smartphone 2	192.168.16.236	255.255.255.192	192.168.16.193
Printer	192.168.16.234	255.255.255.192	192.168.16.193

Topologi

Ping Antar Departemen

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0	PC2	ICMP		0.000	N	0	(edit)	(delete)
	Successful	PC0	PC4	ICMP		0.000	N	1	(edit)	(delete)
	Successful	PC0	PC6	ICMP		0.000	N	2	(edit)	(delete)
	Successful	PC0	PC8	ICMP		0.000	N	3	(edit)	(delete)

Ping antar departemen berhasil semua. PC0 berada di departemen akuntansi melakukan ping dengan PC2 (departemen pengiriman), PC4(departemen pemasaran), PC6(departemen sdm), dan PC8(departemen ti). Itu tandanya ping berhasil dan konfigurasi sudah benar.