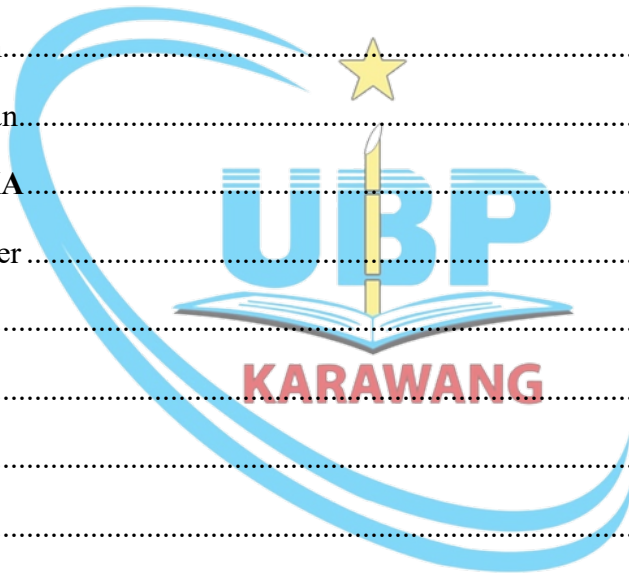


DAFTAR ISI

ABSTRAK	iv
ABSTRACT	iv
KATA PENGANTAR	v
DAFTAR ISI	vi
PENDAHULUAN	1
1.1 Latar Belakang	1
1.2 Rumusan Masalah	2
1.3 Tujuan Penelitian	3
1.4 Manfaat Penelitian	3
TINJAUAN PUSTAKA	4
2.1 Jaringan Komputer	4
2.2 <i>Switch</i>	6
2.3 <i>Router</i>	6
2.4 Kabel	7
2.5 <i>Mikrotik</i>	8
2.6 <i>Bandwidth</i>	10
2.7 Metode <i>Queue</i>	11
2.7.1 <i>Simple Queue</i>	11
2.7.2 <i>Queue Tree</i>	12
2.8 <i>Quality Of Service</i>	13
2.8.1 <i>Throughput</i>	13
2.8.2 <i>Packet Loss</i>	14
2.8.3 <i>Delay</i>	15



2.9 PT Miyuki	15
2.10 <i>Network Development Life Cycle</i> (NDLC)	16
2.10.1 Manfaat Model <i>NDLC</i>	18
2.10.2 Kelemahan Model <i>NDLC</i>	18
METODE PENELITIAN	21
3.1 Metode Penelitian.....	21
3.2 Peralatan Penelitian	24
3.3 Lokasi Dan Waktu Penelitian.....	24
3.4 Simulasi Perancangan	25
3.5 Alur konfigurasi sistem.....	26
IMPLEMENTASI DAN PENGUJIAN	27
4.1 Login Winbox	27
4.2 setting <i>DHCP Client</i>	36
4.3 setting <i>DHCP Server</i>	38
4.4 Setting <i>DHCP Server Untuk Wireless</i>	39
4.5 setting <i>NAT</i>	41
4.6 setting Koneksi Dengan <i>Wireless</i>	44
4.7 Setting <i>Queue Tree</i>	48
4.8 Setting <i>Limit Alokasi Banwidth Di Jaringan Wireless</i>	58
4.9 Pengujian Menggunakan <i>Wireshark</i>	66
PENUTUP	72
5.1 Kesimpulan.....	72
5.2 Saran.....	72
DAFTAR PUSTAKA	73
LAMPIRAN	75
RIWAYAT PENULIS	80



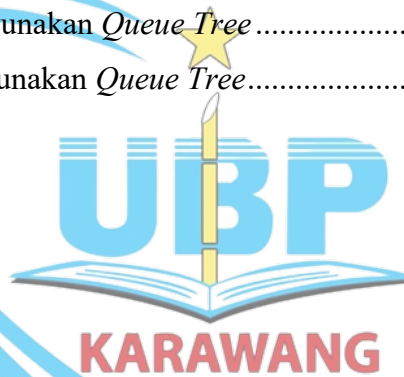
DAFTAR GAMBAR

Gambar 2.1 <i>Switch</i>	6
Gambar 2.2 <i>Router</i>	7
Gambar 2.3 Kabel STP	7
Gambar 2.4 Kabel UTP	8
Gambar 2.6 <i>MikroTik</i>	9
Gambar 2.7 Tahapan Model <i>NDLC</i>	16
Gambar 3.1 Tahapan Metode Penelitian	21
Gambar 3.2 Simulasi perancangan	25
Gambar 3.3 Alur konfigurasi	26
Gambar 4.1 <i>login winbox</i>	27
Gambar 4.2 menu <i>interface bridge wired</i>	28
Gambar 4.3 menu <i>port bridge ether 2</i>	29
Gambar 4.4 menu <i>port bridge ether 3</i>	30
Gambar 4.5 menu <i>port bridge ether 4</i>	30
Gambar 4.6 menu <i>interface bridge wlan</i>	31
Gambar 4.7 menu <i>port bridge wlan</i>	32
Gambar 4.8 Tampilan <i>port bridge</i>	33
Gambar 4.9 <i>IP Address Wired</i>	34
Gambar 4.10 <i>IP Address Bridge wlan</i>	34
Gambar 4.11 Tampilan menu <i>IP Adress</i>	35
Gambar 4.12 <i>Setting DHCP Client</i>	36
Gambar 4.13 Hasil <i>Setting DHCP Client Wired</i>	37
Gambar 4.14 <i>Setting DHCP Server Wired</i>	38
Gambar 4.15 <i>Setting DHCP Server Wlan</i>	39
Gambar 4.16 Hasil <i>Setting DHCP Client Wlan</i>	40
Gambar 4.17 Menu <i>NAT (General)</i>	41
Gambar 4.18 Menu <i>NAT (Action)</i>	42
Gambar 4.19 Hasil Setting <i>NAT</i>	42
Gambar 4.20 Hasil Tes Ping Jaringan <i>Internet</i>	43
Gambar 4.21 Hasil Tes Ping Jaringan <i>Internet (CMD)</i>	43

Gambar 4.22 Hasil <i>Setting Wireless</i>	44
Gambar 4.23 <i>Setting Jaringan Internet Wireless</i>	45
Gambar 4.24 <i>Setting pada profile Password</i>	46
Gambar 4.25 <i>Setting Password Pada Interface Wlan</i>	47
Gambar 4.26 <i>Setting Mangle (General)</i>	48
Gambar 4.27 <i>Setting Mangle (Action)</i>	49
Gambar 4.28 <i>Setting Mangle (Jaringan LAN)</i>	50
Gambar 4.29 <i>Setting Mangle Action (Jaringan LAN)</i>	51
Gambar 4.30 <i>Setting Mangle wireless (General)</i>	53
Gambar 4.31 <i>Setting Mangle wireless Action (Mark Connection)</i>	54
Gambar 4.32 <i>Setting Mangle wireless</i>	55
Gambar 4.33 <i>Setting Mangle wireless Action (Mark Packet)</i>	56
Gambar 4.34 Menu Hasil <i>Setting Mangle wireless</i>	58
Gambar 4.35 <i>Setting Mangle Wireless Action (Mark Connection)</i>	59
Gambar 4.36 <i>Setting Mangle wireless</i>	60
Gambar 4.37 <i>Setting Mangle wireless Action (Mark Packet)</i>	61
Gambar 4.38 Menu Hasil <i>Setting Mangle wireless</i>	62
Gambar 4.39 <i>Setting wireless Upload</i>	62
Gambar 4.40 <i>Setting wireless Limit Upload</i>	63
Gambar 4.41 <i>Setting wireless Download</i>	64
Gambar 4.42 <i>Setting wireless Limit Download</i>	65
Gambar 4.43 Hasil Sebelum <i>Setting Queue Tree</i>	66
Gambar 4.44 Hasil Kecepatan <i>Transfers</i> paket Sebelum <i>Setting Queue Tree</i>	67
Gambar 4.45 Hasil Setelah <i>Setting Queue Tree</i>	69
Gambar 4.46 Hasil Kecepatan <i>Transfers</i> paket Sesudah <i>Setting Queue Tree</i>	70

DAFTAR TABEL

Table 2.1 <i>Category Troughput</i>	14
Table 2.2 <i>Category Packet Loss</i>	14
Table 2.3 <i>Category Delay</i>	15
Table 2.4 Penelitian Terkait.....	14
Table 3.1 Kecepatan Jaringan <i>Internet</i> (<i>Server</i> Banyak Di Gunakan).....	23
Table 3.2 Kecepatan Jaringan <i>Internet</i> (<i>Server</i> Sedikit Di Gunakan)	23
Table 3.3 Rencana Penelitian.....	24
Table 4.1 Hasil kecepatan <i>internet</i> Awal.....	52
Table 4.2 Hasil Kecepatan menggunakan <i>Queue Tree</i> (<i>via wired</i>)	57
Table 4.2 Hasil Kecepatan menggunakan <i>Queue Tree</i> (<i>via wirelees</i>)	66
Table 1.2 Hasil <i>Qos</i> sebelum menggunakan <i>Queue Tree</i>	67
Table 1.2 Hasil <i>Qos</i> sesudah menggunakan <i>Queue Tree</i>	70



DAFTAR LAMPIRAN

Lampiran 1 Formulir Bimbingan Tugas Akhir	75
Lampiran 2 Lembar Perbaikan Penguji I Sidang Tugas Akhir	76
Lampiran 3 Lembar Perbaikan Penguji II Sidang Tugas Akhir	77
Lampiran 4 Lembar Perbaikan Ketua Sidang Tugas Akhir	78
Lampiran 5 Lembar Pengesahan Seminar Proposal	79

