

DAFTAR GAMBAR

Gambar 1. 1 Skenario CCN	4
Gambar 1. 2 Skenario CDN.....	5
Gambar 1. 3 Skenario Proxy Server	5
Gambar 3. 1 Arsitektur Sistem Apache Traffic Server.....	12
Gambar 3. 2 Flowchart Arsitektur Sistem	13
Gambar 4. 1 Implementasi Edge Caching System	16
Gambar 4. 2 Konfigurasi "records.config"	20
Gambar 4. 3 Konfigurasi "ssl_multicert.config"	21
Gambar 4. 4 Konfigurasi "logging.yaml"	22
Gambar 4. 5 HTTP Stats Plugin	22
Gambar 4. 6 Status Apache Traffic Server	23
Gambar 4. 7 Source Code Website Multimedia index.html	24
Gambar 4. 8 Request SSL Website Multimedia.....	25
Gambar 4. 9 Virtual Machine Microsoft Azure.....	25
Gambar 4. 10 Request SSL Website VoD.....	26
Gambar 4. 11 Source Code Website VoD index.html.....	26
Gambar 4. 12 Source Code Website VoD index.js	27
Gambar 4. 13 Status Website Multimedia.....	27
Gambar 4. 14 Tampilan Website Multimedia	28
Gambar 4. 15 Status Web Server Apache2	28
Gambar 4. 16 Output VoD Running.....	28
Gambar 4. 17 Akses VM pada Software Putty.....	29
Gambar 4. 18 Perintah IPTables	29
Gambar 4. 19 Tampilan Website VoD	30
Gambar 4. 20 Source Code Python3.....	31
Gambar 4. 21 Source Code index.html dan JavaScript	33
Gambar 4. 22 Perintah Running finpro.py.....	34
Gambar 4. 23 Finpro Dashboard	34
Gambar 4. 24 Pengaturan Network pada ATS	35
Gambar 4. 25 Pengaturan Network Client Pengujian Kondisi Cache	35
Gambar 4. 26 Pengaturan Network Client Pengujian Kondisi No-cache.....	36
Gambar 4. 27 Pengaturan IPTables	36

Gambar 4. 28 Tampilan HTTP Website Multimedia	37
Gambar 4. 29 Tampilan Squid.log.....	37
Gambar 4. 30 Tampilan Log Dashboard	38
Gambar 4. 31 Penambahan ATS pada Log Dashboard	39
Gambar 5. 1 Topology Skenario Jumlah User.....	43
Gambar 5. 2 Setting Cache pada Client.....	44
Gambar 5. 3 Output “sudo tail -f squid.log”	44
Gambar 5. 4 Setting No Cache pada Client.....	45
Gambar 5. 5 Edge Tier Topology	47
Gambar 5. 6 Mid Tier Topology.....	48
Gambar 5. 7 No-cache Topology.....	48
Gambar 5. 8 Tampilan Putty.....	50
Gambar 5. 9 Directory Video on Demand.....	50
Gambar 5. 10 Command Membagi per Segmen	50
Gambar 5. 11 Output Running Video on Demand	51
Gambar 5. 12 Tampilan VoD Resolusi 480p.....	51
Gambar 5. 13 Tampilan VoD Resolusi 720p.....	51
Gambar 5. 14 Tampilan VoD Resolusi 1080p.....	52
Gambar 5. 15 Grafik CPU Used Website VoD	58
Gambar 5. 16 Grafik Throughput HTTP Multimedia Skenario 50 User.....	59
Gambar 5. 17 Grafik Throughput HTTP Multimedia Skenario 100 User.....	59
Gambar 5. 18 Grafik Throughput HTTPS Multimedia Skenario 50 User	60
Gambar 5. 19 Grafik Throughput HTTPS Multimedia Skenario 100 User	60
Gambar 5. 20 Grafik Response Time HTTP Multimedia Skenario 50 User.....	61
Gambar 5. 21 Grafik Response Time HTTP Multimedia Skenario 100 User.....	62
Gambar 5. 22 Grafik Response Time HTTPS Multimedia Skenario 50 User.....	63
Gambar 5. 23 Grafik Response Time HTTPS Multimedia Skenario 100 User.....	63
Gambar 5. 24 Grafik Throughput HTTP Multimedia Lokasi Edge Ccaching	64
Gambar 5. 25 Grafik Throughput HTTPS Multimedia Lokasi Edge Caching.....	64
Gambar 5. 26 Grafik Response Time HTTP Multimedia Lokasi Edge Caching	65
Gambar 5. 27 Grafik Response Time HTTPS Multimedia Skenario Jumlah Node.....	66
Gambar 5. 28 Grafik Throughput HTTP VoD Skenario Resolusi Video.....	67
Gambar 5. 29 Grafik Throughput HTTPS VoD Skenario Resolusi Video	67
Gambar 5. 30 Grafik Response Time HTTP VoD Skenario Resolusi Video.....	68

Gambar 5. 31 Grafik Response Time HTTPS VoD Skenario Resolusi Video	68
Gambar 5. 32 Grafik Throughput HTTP VoD Lokasi Edge Caching.....	69
Gambar 5. 33 Grafik Throughput HTTPS VoD Skenario Lokasi Edge Caching	69
Gambar 5. 34 Grafik Response Time HTTP VoD Skenario Lokasi Edge Caching.....	70
Gambar 5. 35 Grafik Response Time HTTPS VoD Skenario Lokasi Edge Caching.....	70