

DAFTAR ISI

ABSTRAKSI	i
ABSTRACTION.....	ii
KATA PENGANTAR	iii
DAFTAR ISI.....	vi
DAFTAR TABEL.....	x
DAFTAR GAMBAR	xi
BAB I.....	1
PENDAHULUAN	1
1.1 Latar Belakang	1
1.2 Rumusan Masalah.....	2
1.3 Tujuan	2
1.4 Batasan Masalah	3
1.5 Metodologi.....	4
1.6 Sistematika Penulisan	6
BAB II.....	7
LANDASAN TEORI.....	7
2.1 Aplikasi Terdistribusi	7
2.2 Pemrograman Terdistribusi (<i>Distributed Programming</i>)	7
2.2.1 Deskripsi.....	7
2.2.2 Teknologi Pemrograman Terdistribusi.....	8
2.3 <i>Remote Procedure Call (RPC)</i>	10
2.3.1 Deskripsi.....	10
2.3.2 Jenis <i>Remote Procedure Call</i>	10
2.4 XML-RPC (Extended Mark-Up Language <i>Remote Procedure Call</i>)	11
2.4.1 Deskripsi.....	11
2.4.2 Elemen-elemen XML-RPC	11
2.4.3 Bagaimana XML-RPC bekerja	12
2.5 Remote Method Invocation (RMI).....	13
2.5.1 Deskripsi.....	13

2.5.2 Java-RMI.....	13
BAB III	17
PERANCANGAN DAN IMPLEMENTASI	17
3.1 Gambaran Umum Sistem	17
3.2 Model Program Terdistribusi.....	18
3.2.1 DS-Java RMI.....	18
3.2.2 DS-XML RPC	19
3.3 Model Konseptual.....	19
3.3.1 Pemodelan Fungsionalitas Program	19
3.3.2 Pemodelan Arsitektur Program	27
3.4 Implementasi	36
3.4.1 Ruang Lingkup Implementasi	37
BAB IV	38
PENGUJIAN DAN ANALISIS.....	38
4.1 Lingkungan Pengujian.....	38
4.2 Parameter Pengujian	38
4.3 Pengukuran Parameter Pengujian	39
4.4 Pengujian	40
4.4.1 Skenario Pengujian.....	40
4.5 Analisis Hasil Pengujian.....	41
4.5.1 Analisis Pengukuran Transaction Time	41
4.5.2 Analisis Pengukuran Transfer Time.....	44
4.5.3 Analisis Pengukuran Delay Transaction Time dan Transfer Time	45
4.5.4 Analisis Pengukuran Request Packet Size	46
4.5.5 Analisis Pengukuran Response Packet Size.....	47
BAB V	49
KESIMPULAN DAN SARAN.....	49
5.1 Kesimpulan.....	49
5.2 Saran Pengembangan.....	50
DAFTAR PUSTAKA	51
LAMPIRAN.....	A-1

A. Pemodelan Behavioral	A-1
A.1 Diagram Sekuensial	A-1
A.1.1 Diagram Sekuensial Fungsi View Matrix Server.....	A-1
A.1.2 Diagram Sekuensial Fungsi View Matrix Client	A-3
A.1.3 Diagram Sekuensial Fungsi Zoom In.....	A-4
A.1.4 Diagram Sekuensial Fungsi Laplacian Operator.....	A-6
A.1.5 Diagram Sekuensial Fungsi View Histogram Server.....	A-7
A.1.6 Diagram Sekuensial Fungsi View Histogram Client	A-10
A.1.7 Diagram Sekuensial Fungsi Boolean Matrix.....	A-12
B. Hasil Pengujian	B-1
B.1 Data Pengujian Skenario <i>Small Request- Small Response</i>	B-1
B.1.1 Java RMI.....	B-1
B.1.2 Java XML-RPC	B-1
B.1.3 Python XML-RPC	B-2
B.2 Data Pengujian Skenario <i>Small Request- Big Response</i>	B-3
B.2.1 Java RMI.....	B-3
B.2.2 Java XML-RPC	B-4
B.2.3 Python XML-RPC	B-5
B.3 Data Pengujian Skenario <i>Big Request- Small Response</i>	B-6
B.3.1 Java RMI.....	B-6
B.3.2 Java XML-RPC	B-6
B.3.3 Python XML-RPC	B-7
B.4 Data Pengujian Skenario <i>Big Request- Big Response</i>	B-8
B.4.1 Java RMI.....	B-8
B.4.2 Java XML-RPC	B-9
B.4.3 Python XML-RPC	B-10
C. Cummulative Distrbution Function (CDF)	C-1
D. Grafik Representasi Data	D-1
D.1 Transaksi Small Request – Small Response.....	D-1
D.2 Transaksi Small Request – Big Response	D-3
D.3 Transaksi Big Request – Small Response	D-5

D.4 Transaksi Big Request – Big Response	D-7
D.5 Grafik Perbandingan Transfer Time Small Request- Small Response.....	D-8
D.6 Grafik Perbandingan Transfer Time Small Request- Big Response	D-9