

DAFTAR ISI

| | |
|--|------|
| LEMBAR PENGESAHAN | ii |
| LEMBAR PERNYATAAN ORISINALITAS | iii |
| ABSTRAK | iv |
| <i>ABSTRACT</i> | v |
| LEMBAR PERSEMBAHAN | vi |
| KATA PENGANTAR | viii |
| DAFTAR ISI..... | ix |
| DAFTAR LAMPIRAN..... | xii |
| DAFTAR GAMBAR | xiii |
| DAFTAR TABEL..... | xiv |
| DAFTAR ISTILAH | xv |
| DAFTAR SINGKATAN | xix |
| BAB I PENDAHULUAN | 1 |
| I.1 Latar Belakang | 1 |
| I.2 Rumusan Masalah | 3 |
| I.3 Tujuan Penelitian | 3 |
| I.4 Manfaat Penelitian | 3 |
| I.5 Batasan Penelitian | 4 |
| I.6 Sistematika Penulisan | 4 |
| BAB II LANDASAN TEORI | 6 |
| II.1 Data dan Informasi | 6 |
| II.1.1 Pengertian Data | 6 |
| II.1.2 Pengertian Informasi | 6 |
| II.2 <i>Data Center</i> | 6 |
| II.3 <i>Business Continuity</i> | 7 |
| II.4 <i>Disaster Recovery Center</i> | 7 |
| II.5 <i>Disaster Recovery Startegy</i> | 8 |
| II.6 <i>Backup</i> dan <i>Restore</i> | 9 |
| II.6.1 Pengertian <i>Backup</i> | 9 |
| II.6.2 Pengertian <i>Restore</i> | 9 |
| II.6.3 <i>Basic Media Backup</i> | 10 |

| | | |
|---------|---|----|
| II.6.4 | Metode <i>Backup-Restore</i> | 10 |
| II.7 | <i>Software</i> Bacula | 11 |
| II.7.1 | Profil Bacula..... | 11 |
| II.7.2 | Komponen Bacula..... | 11 |
| II.7.3 | Fitur Bacula..... | 12 |
| II.8 | Kriptografi..... | 13 |
| II.8.1 | Definisi Kriptografi | 13 |
| II.8.2 | Tujuan Dasar Kriptografi | 13 |
| II.8.3 | Algoritma dalam Kriptografi | 14 |
| II.9 | <i>Quality of Service</i> | 15 |
| II.10 | <i>Full Backup-Restore</i> | 17 |
| II.11 | Alasan Pemilihan Metode <i>Remote Full Backup-Restore</i> | 18 |
| II.12 | Penelitian Sebelumnya | 19 |
| BAB III | METODOLOGI PENELITIAN | 22 |
| III.1 | Model Konseptual | 22 |
| III.2 | Sistematika Penelitian | 23 |
| III.2.1 | Tahap Awal | 25 |
| III.2.2 | Tahap Hipotesis..... | 25 |
| III.2.3 | Tahap Simulasi..... | 25 |
| III.2.4 | Tahap Analisis..... | 25 |
| III.2.5 | Tahap Akhir | 26 |
| BAB IV | RANCANGAN SISTEM DAN SKENARIO PENGUJIAN..... | 27 |
| IV.1 | Rancangan Sistem | 27 |
| IV.1.1 | Instrumen Fisik | 27 |
| IV.1.2 | Instrumen Program..... | 29 |
| IV.2 | Topologi Pengujian | 31 |
| IV.2.1 | Topologi Fisik | 31 |
| IV.2.2 | Topologi <i>Logic</i> | 32 |
| IV.3 | Skenario Pengujian..... | 32 |
| IV.3.1 | Skenario Pengujian Integritas Data..... | 33 |
| IV.3.2 | Skenario Pengujian Kecepatan Proses | 34 |
| IV.4 | Tujuan Pengujian | 34 |

| | | |
|---------|--|----|
| IV.4.1 | Integritas Data | 34 |
| IV.4.2 | Kecepatan Proses | 35 |
| BAB V | PENGUJIAN SISTEM DAN ANALISIS SISTEM | 36 |
| V.1 | Pengujian Sistem..... | 36 |
| V.1.1 | Pengujian Integritas Data | 36 |
| V.1.1.1 | <i>MD5 Checksum</i> | 37 |
| V.1.1.2 | <i>Digital Signature</i> | 38 |
| V.1.2 | Pengujian Kecepatan Proses Data..... | 40 |
| V.1.2.1 | Pengujian Objek-1 | 42 |
| V.1.2.2 | Pengujian Objek-2 | 43 |
| V.1.2.3 | Pengujian Objek-3 | 44 |
| V.2 | Analisis..... | 45 |
| V.2.1 | Analisis Integritas Data | 45 |
| V.2.1.1 | <i>Analisis MD5 Checksum</i> | 45 |
| V.2.1.2 | <i>Analisis Digital Signature</i> | 51 |
| V.2.2 | Kecepatan Proses Data..... | 52 |
| BAB VI | KESIMPULAN DAN SARAN | 56 |
| VI.1 | Kesimpulan | 56 |
| VI.2 | Saran..... | 58 |
| | DAFTAR PUSTAKA | 59 |