

## DAFTAR ISI

|                                                 |      |
|-------------------------------------------------|------|
| HALAMAN PENGESAHAN .....                        | i    |
| HALAMAN PENGESAHAN .....                        | ii   |
| PERNYATAAN BEBAS PLAGIARISME .....              | iii  |
| HALAMAN PERSETUJUAN PUBLIKASI PROYEK AKHIR..... | iv   |
| KATA PENGANTAR .....                            | v    |
| ABSTRAK.....                                    | vi   |
| ABSTRACT .....                                  | vii  |
| DAFTAR ISI.....                                 | viii |
| DAFTAR GAMBAR .....                             | xi   |
| DAFTAR TABEL .....                              | xiii |
| DAFTAR LAMPIRAN .....                           | xiv  |
| BAB I PENDAHULUAN .....                         | 1    |
| 1.1. LATAR BELAKANG .....                       | 1    |
| 1.2. RUMUSAN MASALAH .....                      | 6    |
| 1.3. BATASAN MASALAH .....                      | 6    |
| 1.4. TUJUAN PENELITIAN .....                    | 6    |
| 1.5. MANFAAT PENELITIAN .....                   | 7    |
| 1.6. METODOLOGI PENELITIAN .....                | 7    |
| 1.7. SISTEMATIKA PENULISAN .....                | 7    |
| BAB II LANDASAN TEORI .....                     | 8    |
| 2.1. PENELITIAN TERDAHULU.....                  | 8    |
| 2.2. RT/RW NET.....                             | 8    |
| 2.2.1. FUNGSI UTAMA RT/RW NET .....             | 8    |
| 2.3. MONITORING DAN MANAJEMEN JARINGAN .....    | 9    |
| 2.4. PRTG.....                                  | 10   |
| 2.4.1. Fitur PRTG .....                         | 10   |
| 2.4.2. Sensor PRTG.....                         | 11   |

|                                                                      |           |
|----------------------------------------------------------------------|-----------|
| 2.5. PC MIKROTIK X86 .....                                           | 13        |
| 2.6. OPTICAL LINE TERMINAL .....                                     | 13        |
| 2.7. OPTICAL DISTRIBUTION POINT .....                                | 14        |
| 2.8. OPTICAL NETWORK TERMINAL .....                                  | 15        |
| 2.9. MEDIA CONVERTER OPTIK (HTB) .....                               | 15        |
| 2.10. PROTOKOL JARINGAN .....                                        | 16        |
| 2.11. SIMPLE NETWORK MANAGEMENT PROTOCOL.....                        | 17        |
| <b>BAB III PERANCANGAN DAN ANALISA .....</b>                         | <b>18</b> |
| 3.1. OBJEK PENELITIAN.....                                           | 18        |
| 3.2. SPESIFIKASI PERANGKAT .....                                     | 18        |
| 3.3. DIAGRAM ALIR PERANCANGAN SISTEM MONITORING PRTG .....           | 19        |
| 3.4. TOPOLOGI JARINGAN YASMINE.NET .....                             | 21        |
| 3.5. PEMILIHAN SENSOR DAN INTERFACE PRTG MONITORING .....            | 23        |
| 3.6. TAHAP PERANCANGAN SISTEM MONITORING PRTG .....                  | 24        |
| 3.7. SETTING REPORT HASIL MONITORING PRTG .....                      | 28        |
| <b>BAB IV HASIL DAN PEMBAHASAN .....</b>                             | <b>33</b> |
| 4.1. TRAFFIC PRTG .....                                              | 33        |
| 4.1.1. Core Health.....                                              | 33        |
| 4.1.2. Probe Health.....                                             | 34        |
| 4.1.3. System Health .....                                           | 34        |
| 4.1.4. PING .....                                                    | 35        |
| 4.1.5. Uptime.....                                                   | 36        |
| 4.2. Tabel Hasil Traffic .....                                       | 37        |
| 4.3. INTERFACE ISP .....                                             | 38        |
| 4.3.1. <i>Interface WAN Traffic / ISP Remala</i> .....               | 38        |
| 4.3.2. <i>Interface ISP2-EOBB= Biznet Traffic / ISP Biznet</i> ..... | 39        |
| 4.4. VLAN PELANGGAN AKTIF ATAU KONDISI UP.....                       | 39        |
| 4.4.1. Vlan 100=]Jalur_Tegal Traffic.....                            | 40        |
| 4.4.2. VLAN_103=]Jalur Abah Traffic .....                            | 41        |

|                                                         |           |
|---------------------------------------------------------|-----------|
| 4.5. VLAN PELANGGAN TIDAK AKTIF ATAU KONDISI DOWN ..... | 41        |
| 4.5.1. [pppoe-Rika@tegal05] Traffic.....                | 42        |
| 4.5.2. [pppoe-Rt06@ymn] Traffic.....                    | 43        |
| 4.6. Hasil <i>Traffic Interface</i> .....               | 45        |
| <b>BAB V PENUTUP</b> .....                              | <b>47</b> |
| 5.1. KESIMPULAN.....                                    | 47        |
| 5.2. REKOMENDASI.....                                   | 47        |
| <b>DAFTAR PUSTAKA</b> .....                             | <b>48</b> |
| <b>LAMPIRAN</b> .....                                   | <b>50</b> |