

ABSTRAK

Pengembangan modul reporting pada aplikasi SOMAD (*Switching Operation Maintenance and Administration*) ini secara khusus menangani perkembangan kualitas jaringan GSM. Nilai-nilai yang menentukan kualitas jaringan GSM disimpan dalam berbagai database, berbagai tabel. Ditambahkan fitur untuk membuat *monitoring service* yang ditentukan secara *custom* oleh admin yang berwenang. *Monitoring service* ini akan memantau perubahan nilai suatu kolom pada suatu tabel dalam *database* tertentu. Jika nilai tersebut berada di luar standar yang telah ditentukan sebelumnya, maka sistem akan mengirimkan SMS dan/atau email kepada user yang telah mendaftar *service* tersebut. User dapat mendaftar untuk berlangganan *service* tersebut via web intranet ataupun via SMS dengan mengetikkan format tertentu. Dan permohonan tersebut akan diproses oleh Admin yang telah membuat *service*.

Aplikasi ini dikembangkan dengan menggunakan *webserver* Apache 2.2, PHP 5.2.4 dan MySQL 5.0 sebagai *database server*. Untuk menguji pengiriman/penerimaan SMS, digunakan aplikasi Gammu sebagai SMS Gateway. Untuk pengiriman e-mail, digunakan kelas dari PHPMailer. Untuk mengatur penjadwalan pelaksanaan fungsi SMS dan Service, digunakan fitur *Scheduled Task* dari Windows.

Kata kunci: *monitoring service, service quality assurance*

ABSTRACT

This reporting module extends the Switching Operation Maintenance and Administration application which specifically handle GSM network quality development. Values that determine network's quality are stored at several databases, countless tables. This extension contain monitoring service feature that custom-built by authorize administrator. This monitoring service will observe values changes at specified column at particular table on certain database. If those values are out of determined range, system will send SMS and/or email to subscribed users. User could subscribe service via intranet website or by sending certain format of SMS. And those requests of service would be processed by admin that made the requested service.

This application is developed using Apache 2.2 as webserver, PHP 5.2.4 as scripting language dan MySQL 5.0 as database server. To examine SMS transmit/reception, Gammu as SMS Gateway is used. To deliver notification e-mail, additional class from PHPMailer is appended. To handle SMS exchange and service execution scheduling; Scheduled Task from Windows is used.

Keywords: monitoring service, service quality assurance

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