UNIVERSITI TEKNOLOGI MARA

ANDROID CLIENT FOR NAGIOS IN MONITORING LINUX SERVER

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ABSTRACT

System administrator and network administrator are responsible for continuity of respective servers, even when they are out of the server area. While smartphones usage is not just a trend; people critically need it to enhance works. Therefore, this project or VNag, presents usage of Android smartphones to monitor servers as a solution to the problem. Nagios is the most popular application for monitoring among those that exist on the market. Data derived from Nagios cgi-bin file, will be displayed on smartphone for remote viewing. Nagios parameter such as services, hosts, and information of server status, are fetched using HTTP GET. Upon having a request, server replies with HTTP RESPONSE and data is parsed by HTML parser JSOUP. The software is created using Eclipse Juno SDK, along with ADT and JSOUP. The work presents dynamic data fetch as different servers will have contrastive services. A test conducted reveals that the software is able to fetch data in less than 20 second. Although the traffic is heavy, the application is still working with higher delay. An incorrect URL, username and password will prohibit the user from continuing. The software enables system administrator and network administrator to remotely monitor their respective servers.

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CHAPTER 1

INTRODUCTION

1.0 Introduction

Nowadays smartphone are embedded into daily life, apart from making a call and send text messages, smartphone act as a pocket PCs and extend the desktop experience. Based on Google's research in 2011, 89% of smartphone user uses their smartphone throughout the day (Voskresensky, 2011). Smartphone usage has been not only a trend, but critical needs to enhance daily work. Smartphone user normally wants to stay connected with family, colleagues and people from all over the world via email and social networking sites. With the advance technology on smartphone, many smartphone applications are developed by software companies to help smartphone user make their busy life easier. Among all the smartphone Operating System (OS) in the market, Android surprisingly holds the largest share which increases drastically to 72.4% in 3rd quarter from 59% in 1st quarter for 2012 (Schroeder, 2012)(Kellex, 2012).

1.1 Problem Statement

With the rapid growing of smartphone market, mobile phones, PDAs and Palms are getting replaced by smartphone especially for the average users (Himmetsbach, 2011). Smartphone vendor such as Samsung and HTC has been mass producing various models of smartphone based on users' needs. Users are depending on Android smartphone technology to make their daily business portable. For users like system and network administrator, they still holds the responsibility of making the business is still operating even though they are