Network Monitoring System For People's Bank

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Declaration

I declare that this dissertation does not incorporate, without acknowledgment, any material previously submitted for a Degree or a Diploma in any University and to the best of my knowledge and belief, it does not contain any material previously published or written by another person or myself except where due reference is made in the text. I also hereby give consent for my dissertation, if accepted, to be made available for photocopying and for interlibrary loans, and for the title and summary to be made available to outside organization.

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Abstract

People's Bank is one among the leading financial institute in Sri Lanka. The Bank successfully hosts more than 600 outlet and 335 ATMs. Adding to that, they maintain a large computer network which spread within the whole country.

To provide high quality of service in convenient way, it is important that the Bank's computer network been highly reliable, available and efficient. Thus the necessity of owning a well-suited Network Monitoring System is required to serve this purpose.

The main purpose of this report is to describe how we would be able to fulfill the People's Bank specifications and ensure that they gain the final output from the project. As a starting point, the report introduces the project and eventually reviews and discusses the internal system structure and main features of the final system. Under the functional features we present core areas of the monitoring system: such as monitoring Routers in Windows platform. Monitoring SNMP would enable network devices and prediction process. Additional feature of the system have been looked at under the heading of Non Functional Features. Therefore the introduction of this new system is intended to eliminate the drawbacks of existing network monitoring method. Results could be achieved by monitoring the time, availability, usage & security of the network and also through traffic management, SMS alerts & provide predictions.

The persons authorized to access this system directly, are the network administrators. On the other hand network monitoring persons will have different privileges to access the system.

Monitoring system was developed using web technologies. Server side scripting was done by using PHP. Simple Network Management Protocol was used to communicate between router & the server. My SQL Database system has been used for database Management.

After implementing this system, we can reduce manpower, time and network down time. The system would be an efficient, effective and confidential Network Monitoring System for the People's Bank Network.

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List of Acronyms

	Term
ATM	Automated Teller Machine
EIGRP	Enhanced Interior Gateway Routing Protocol
HTML	Hyper Text Markup Language
IP	Internet Protocol
LAN	Local Area Network
MRTG	Multi Router Traffic Grapher
NMS	Network Monitoring System
PING	Packet InterNet Groper
RIP	Routing Information Protocol
SIBS	Silverlake Integrated Banking System
SNMP	Simple Network Management Protocol
WAN	Wide Area Network