

# **Monitoring Bandwidth Usage and Server Performance**

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# Monitoring Bandwidth Usage and Server Performance

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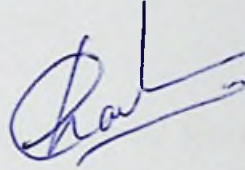
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## Declaration

We declare that this thesis is our own work and has not been submitted in any form for another degree or diploma at any university or other institution of tertiary education. Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is given.

Chandana Wimalaratne

Name of Student



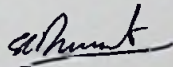
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C.L. Wimalarathne

## Abstract

The University of Ruhuna, one of the leading Universities in Sri Lanka is committed to quality education, research excellence, and strategic partnership with industry and community development. The University needs to take an initiative in developing an intellectual, academic and research base that can attract energetic young academics and professionals to engage in creating the knowledge base that is essential for the development of the Southern region. Since the University of Ruhuna now consists of 7 faculties - Agriculture, Engineering, Fisheries and Marine Sciences & Technology, Humanities & Social Sciences, Management & Finance, Medicine and Science - that cover vitally important aspects in the development paradigm, what remains to be done is to energise the faculties in their research and training activities.

Use of Internet grew fast rate after the introduction of the World Wide Web. Most of the people trying to do their day-to-day work by using Internet. Also the “e” concept is more popular and grew very fast in the world.

For the Internet, bandwidth usage is the very important and valuable issue. Users have to pay for Internet usage, due to that monitoring is one of the very essential events. This project is addressing the Monitoring Bandwidth usage, on application level which runs on a computer system with squid web cache software on Linux operating system. Currently University of Ruhuna does not have any efficient bandwidth monitoring system. Proposed system will address this problem.

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## List of Acronyms

Ruhuna-MBS	: Name of the Outcome system of the Project
Ruhuna-LAN	: Local Area Network at University of Ruhuna (wellamadama complex)
DCS	: Department of Computer Science/ Computer Unit
LEARN	: Lanka Education And Research Network
UoR	: University of Ruhuna
PHP	: Hypertext Preprocessor
MRTG	: Multi Router Traffic Graper
OS	: Operating System
HTML	: Hyper Text Markup Language
XML	: Extensible Markup Language
DBMS	: Database Management System
MS SQL	: Microsoft Standard Quarry Language
SQL	: Structured Query Language
MS	: Microsoft
UML	: Unified Modeling Language
WWW	: World Wide Web
MBS Server	: Bandwidth monitoring server