



UNIVERSITY OF NAIROBI

SCHOOL OF COMPUTING AND INFORMATICS

MSc. COMPUTER SCIENCE RESEARCH PROJECT

A Heterogeneous System for Monitoring Disk Space and Log Files: A CORBA Based Approach

By

Leslie Chemwolo: P56/8859/05

Supervisor

Andrew Mwaura Kahonge

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University of NAIROBI Library



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DECLARATION

This research project is my original work and has not been presented for any other
University award

DECLARATION

This research project is my original work and has not been presented for a degree in any other university



Leslie K. Chemwolo

This research has been submitted for examination with my approval as a university supervisor



Andrew Mwaura Kahonge

ABSTRACT

As organizations rely more and more on computers there is a great need to maintain uptime on them, especially on the servers. System Administrators continually monitor the state of servers for any events that require their attention. Monitoring a large number of servers manually can prove to be a hard task. Monitoring tools are employed to check the health of a network and its devices. Most leading network monitoring tools are limited on the platform they can run. Ways of enabling third party development and extensibility are missing in most of them.

In this project a three-tier application based on CORBA has been developed. The system is distributed and heterogeneous. It makes use of distributed objects written in Java and C++. The project focuses on monitoring disk space and log files on the servers. Each individual System Administrator can subscribe for events that he/she is interested in. Events are relayed in real-time to enable the system administrators to act fast. Efforts are made to present the data in ways that makes it easy to pick out critical events.

As events happen the system automatically starts remedial procedures to correct any problem and notifies the system administrators of the occurrence of the event. It lets them know the results of the remedial procedures as well.