Architecture of Network Management Tools for Heterogeneous System

Rosilah Hassan, Rozilawati Razali, Shima Mohseni,
Ola Mohamad and Zahian Ismail
Department of Computer Science,
Faculty of Information Science and Technology
Universiti Kebangsaan Malaysia, Bangi, Selangor, Malaysia

Abstract—Managing heterogeneous network systems is a difficult task because each of these networks has its own curious management system. These networks usually are constructed on independent management protocols which are not compatible with each other. This results in the coexistence of many management systems with different managing functions and services across enterprises. Incompatibility of different management systems makes management of whole system a very complex and often complicated job. Ideally, it is necessary to implement centralized meta-level management across distributed heterogeneous systems and their underlying supporting network systems where the information flow and guidance is provided via a single console or single operating panels which integrates all the management functions in spite of their individual protocols and structures. This paper attempts to provide a novel network management tool architecture which supports heterogeneous managements across many different architectural platforms. Furthermore, an architectural approach to integrate heterogeneous network is proposed. This architecture takes into account both wireless fixed and mobile nodes. Keywords-component; Network Tools Architecture; Services Management; Heterogeneous System;