

Abstract

Service Specific Overlay Networks have recently attracted a great interest, and have been extensively investigated in the context of multimedia delivery over the internet. they are virtual networks constructed on top of the underlying network and they have been proposed to provide and improve services not provided by other traditional networks to the end users. The increased complexity and heterogeneity of these networks in addition to ever changing conditions in the network and the different types of faults that may occur make their control and management by human administrators more difficult. Therefore, self-healing concept was introduced to handle these changes and to assure highly reliable and dependable network system performance. Self-healing aims at ensuring that the service will continue to work regardless of defects that might occur in the network. This paper introduce literature in the area of self-healing overlay networks, present their basic concepts, requirements, and architectures. In addition to that we present a proposed self-healing architecture for multimedia delivery services. Our proposed solution is oriented to discover new approaches for monitoring, diagnosing, and recovering of services thus achieving self-healing.