Philadelphia University

SELF-CONFIGURABLE OVERLAY NETWORKS DESIGN & EVALUATION

MSc Project in Computer Science

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Abstract:

The rapid growth of networks and services has introduces new complex environments. To cope with this complexity, IBM proposed Autonomic computing. It allows systems to mange themselves instead of relying on IT professionals. On the other hand, overlay networks are getting a great attention due to the reliable and effective services that they provide. With the increased number of mobile users and services, overlay networks management is becoming more complex. Self-configuration, an autonomic function, has been used to solve overlay networks management complexity through creating a self-configured environment that can respond automatically and transparently to changing conditions.

The main objective of this research project is to study design requirements of self-configuration systems and present their concepts, architectures, applications and challenges.