



An Autonomic Architecture for Network Management and Control

<http://www.firstlight.cn> 2008-12-31

Today's networks comprise a large number of Network Elements (NEs) such as routers, firewalls, gateways, hosts, etc., each performing a set of elementary functions related to routing, security management, resource reservation, Quality of Service (QoS) management, etc. More sophisticated functions such as configuration of NEs, optimization of routing tables, troubleshooting, etc., are mainly handled in a centralized fashion often involving human intervention. However, networks are increasingly faced with rapidly changing situations and ever more complex configurations which are harder to adequately control in a centralized manner, because of timing issues (collecting and processing information takes time) and complexity issues (dealing with networks centrally/globally is increasingly complex). In this paper we propose an autonomic architecture for controlling and managing current and future networks. This solution enables the performance of control and management functions in a decentralized way, dealing locally with simpler situations in a more responsive way.

[存档文本](#)