

Firewall Redundancy Rules Filtering using Integrity Rules Checking

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Securing your network plays a very crucial role in organizations, institutions, and personal home networks. A firewall is a first network defender that located at the entrance between a private network and the public network. Firewall had this job to monitor the arriving or leaving packet into and from the network, while making a decision whether to give permission or deny the packet based on its rules policy requirements. Commonly, there will be a large of firewall rules set are stored inside the firewall which each packet need to be compared sequentially with filtering until matching rules is found. A new strategy of integrity rules checking is proposed to reduce a firewall rules by analyzing the integrity among the firewall rules relationship to be checked for incoming packet. We believe that the proposed strategy will minimize the firewall rules set and undoubtedly optimize the time of firewall rules filtering.

Keywords: Secure Network, Firewall Rules, Integrity Rules, Relation.