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Security enhancement for software defined network using game theoretical approach

T.P. Anithaashri ^a $\stackrel{\triangle}{\sim}$ $\stackrel{\boxtimes}{\bowtie}$, G. Ravichandran ^b, R. Baskaran ^c $\stackrel{\boxtimes}{\bowtie}$

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Abstract

<u>Software Defined Networking</u> (SDN) is a new approach for network <u>programmability</u>, which refers to the ability to control, change, and manage network behavior dynamically through software via open interfaces in contrast to relying on closed boxes and proprietary defined interfaces. It envisions the plan, deploy the critical service, performance and IT management upgrades for the utilization of 5th generation technology. The SDN framework enables centralized control of data path elements independently of the network technology used to connect these devices that can originate from different vendors. The centralized control embeds all the intelligence and maintains a network wide view of the data path elements and links that connect them. The novel approach will enhance the security for <u>software defined network</u> using the concept of game theory approach. The experimental results and analysis show that this approach has palpable advantages to enhance security in SDN.



Next



Keywords

Software defined network; Game theory; Network security

1. Introduction