

Research on the IP address allocation problem of the DHCP protocol and simulation in an E-LAN network

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Abstract: In the context of increasing demand for efficient management of network resources, research and optimization of the IP address allocation process through the DHCP protocol have become important. This topic focuses on analyzing current issues in DHCP usage, especially in complex E-LAN network environments. The project aims to build a simulation system to test and evaluate the effectiveness of new IP address allocation strategies. The applied method combines theory with experimentation to ensure accuracy and feasibility in practical applications. The expected results of the project will contribute to improving network performance and enhancing service quality for end users.

Keywords: DHCP, E-LAN, IP address allocation, Simulation, Network management