

MIMO technology for Wi-Fi networks.

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Abstract: The article discusses the research and implementation of Multiple-Input Multiple-Output (MIMO) technology in Wi-Fi network systems to improve data transmission performance. The context for selecting this topic stems from the increasing demand for internet connection speed and service quality. The objective of the research is to analyze the theoretical aspects of MIMO, design and implement a Wi-Fi system using this technology, and compare its performance with traditional methods. The methodology includes synthesizing existing literature, conducting simulation experiments, and performing real-world testing. The expected results will provide useful solutions for future Wi-Fi network improvements, contributing to enhanced internet service quality.

Keywords: MIMO, Wi-Fi, data transmission, transmission technology, performance improvement