

## وزارة التعليم العالي والبحث العلمي,العراق جامعة بابل كلية تكنلوجيا المعلومات قسم شبكات المعلومات الدراسة :(الصباحي)



## انشاء شبكة وحمايتها

## Create and protect a network

مشروع التخرج هو متطلبات الحصول على درجة البكالوريوس في تخصص شبكات المعلومات في تكنلوجيا المعلومات

A Graduate Project Submitted to the department of Information Networks of the College of Information Technology, University of Babylon, in Partial Fulfillment of the Requirements for the Bachelor's degree in the Information Networks of Information Technology

الطالب

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## **Abstract**

This research focuses on designing and implementing a computer network to transfer files using the FTP protocol and improving security using Access Lists in the ICMP protocol. The OSPF protocol is used to manage IP addresses and ensure efficient routing within the network. Access Lists are configured on servers to block ICMP connections from outside and restrict access to the FTP service on specific machines. The network performance was studied and the results were analyzed to determine the strengths and weaknesses of the design. The results indicate the effectiveness of using OSPF in distributing IP addresses and achieving dynamic routing. The study also demonstrated the effectiveness of using Access Lists in enhancing security by preventing unauthorized ICMP connections and restricting access to the FTP service. The results and conclusions are discussed and suggestions are made to improve performance and extend future research.