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# أمن نظام أسماء النطاقات ومستخدميه Securing DNS and it's Users

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## Abstract

This project focus on securing one of the most importance services on the internet which is the Domain Name System (DNS), it starts with a general introduction about the DNS (by defining it major elements and how it works) then it discusses the major security elements that may affect the system and how we can eliminate and reduce their effect by providing some real examples on how to do it.

This project also discusses one of the newest and most important issues related to DNS which is Internationalized Domain Names (IDN) that enable the users to have domain names in many languages other that English (ACSII characters), with a narrow focus on Arabic Domain names (ADN) and their security concerns.

The study in this project depends on the wide research that has been done on the project main topics (DNS and Security) by collecting and analyzing information from many sources (such as books, researches, and papers) and compares that with the practical and technical experience in both fields, and applying the research results to the real field by doing a wide study(active technical research) about the current DNS security status for some of the most important companies and organization in Saudi Arabia (such as: ISPs, banks, government entities ..etc) and try to fine what are the most security elements that may affect DNS security in the Kingdome. The study shows interested result that shows vulnerability in our national DNS that may affect our national security. In that study, we go beyond finding fault by stating our recommendation to strengthen the DNS.