Security Analysis of Top Visited Arabic Web Sites

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Abstract—The richness and effectiveness of client-side vulner- abilities contributed to an accelerated shift toward client-side Web attacks. In order to understand the volume and nature of such malicious Web pages, we perform a detailed analysis of a subset of top visited Web sites using Google Trends. Our study is limited to the Arabic content in the Web and thus only the top Arabic searching terms are considered. To carry out this study, we analyze more than 7,000 distinct domain names by traversing all the visible pages within each domain. To identify different types of suspected phishing and malware pages, we use the API of Sucuri SiteCheck, McAfee SiteAdvisor, Google Safe Browsing, Norton, and AVG website scanners. The study shows the existence of malicious contents across a variety of types of Web pages. The results indicate that a significant number of these sites carry some known malware, are in a blacklisting status, or have some out- of-date software. Throughout our analysis, we characterize the impact of the detected malware families and speculate as to how the reported positive Web servers got infected.

Keyword— Malware, Malicious links, Web spam, Search engine spam, Web vulnerabilities

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