ABSTRACT

SECURITY HARDENING VIRTUAL PRIVATE SERVER OPERATING SYSTEM AT XYZ EDUCATIONAL INSTITUTION BASED ON NIST SP 800-123

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The use of web-based applications has become an important part of today's educational institutions, especially universities. This web-based application can develop with the support of hosting servers which are an important part of web-based application data storage, making server hosting the main target of attacks to get important data from web-based applications. Attacks on servers are currently growing very rapidly because the data on the server can be misused by irresponsible parties, the security hardening method used will help the process of data security on a server. This study identifies the security contained in the virtualxyz server and performs a hardening process to improve security. The steps of this research use the NIST SP 800-123 standard which aims to carry out a checklist that includes patch updates, configurations, additional security, and testing on the server, after the checking process is carried out, it is continued with the hardening process which aims to check directly on the server for find the right recommendation. The main object of this research is the strengthening of security on the virtualxyz operating system. The results of the checking found 22 checklists that were not fulfilled from a total of 29 existing checklists. The results of the hardening process provide recommendations that are evaluated first to ensure the recommendations are correct to improve server security.

Keywords : ***Hardening*, NIST, *Server*.**