ABSTRACT

VULNERABILITY MANAGEMENT ANALYSIS ON VULNERABLE DOCKER IMAGES AND DOCKER IMAGES APPLICATION USING CLAIR SCANNER AND JOOMSCAN BASED ON GSA CIO-IT SECURITY STANDARD-17-80

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This study analyzes the vulnerability management process for Docker Images and Docker Images applications using the GSA CIO-IT Security-17-80 standard. This vulnerability search uses two scanning tools, namely Clair Scanner and JoomScan. Vulnerabilities in Docker Images and Docker Images application version - 1, were overcome by creating a new system, namely version - 2 which upgrades the Docker Images software and Docker Images application. The test scenario is run by scanning for vulnerabilities in two versions of the trial system, in the form of a vulnerability report. The data was analyzed using the GSA CIO-IT Security Standard-17-80 which was limited to the stages of Scanning Capabilities, Vulnerability Scanning Process, Vulnerability Scan Reports, Remediation Verification, and Re-Classification of Known Vulnerabilities. The result is the fastest scanning time is in version - 2, the results of the comparison of vulnerabilities obtained are 44.45% on Docker Images and 77.78% on Joomla. Continuation of research can be in the form of using the 6 stages of GSA with the support of adequate vulnerability data from the right scanner software.

Keywords: Vulnerability, GSA CIO-IT Security-17-80, Scanning, Stages