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(57) Abstract :

The present disclosure relates to a system (100) for detecting any security flaws, vulnerabilities or data corruption in any containers of a Kubernetes cluster (110). The system performs vulnerability scanning (104) that includes active and passive tests to check the state of the cluster in a running and stable state to detect all possible vulnerabilities. The system also consists of a feature to scan any additional storage space that may be connected to the Kubernetes cluster (110). The system can also deploy a monitoring solution (106) after each and every Git command to ensure security in every step of a code execution. The features include replacing any corrupt containers or killing them if they are completely unresponsive to increase security and also decrease any latency that it may cause. The method includes conducting penetration testing (108) that the user chooses to detect all security vulnerabilities or flaws without missing out on any.

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