NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE

School of Computer Science and Engineering
College of Engineering

Ensuring Security and Reliability

of deployments in Kubernetes

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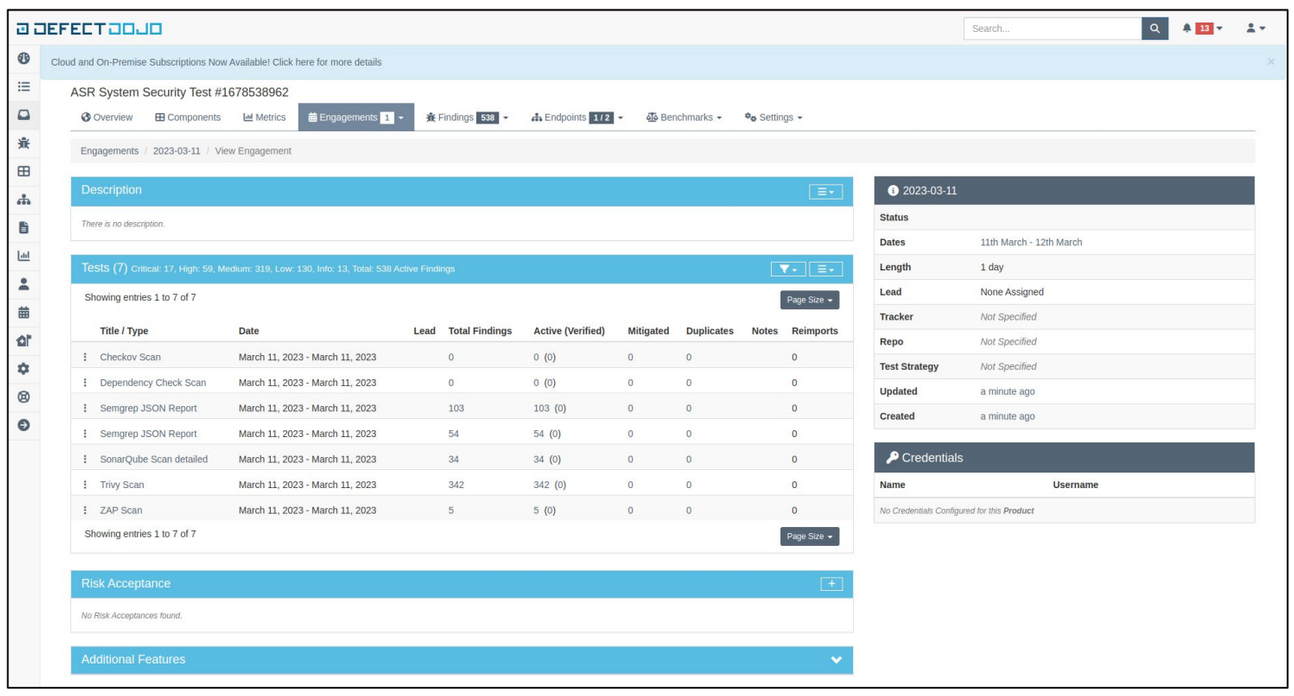
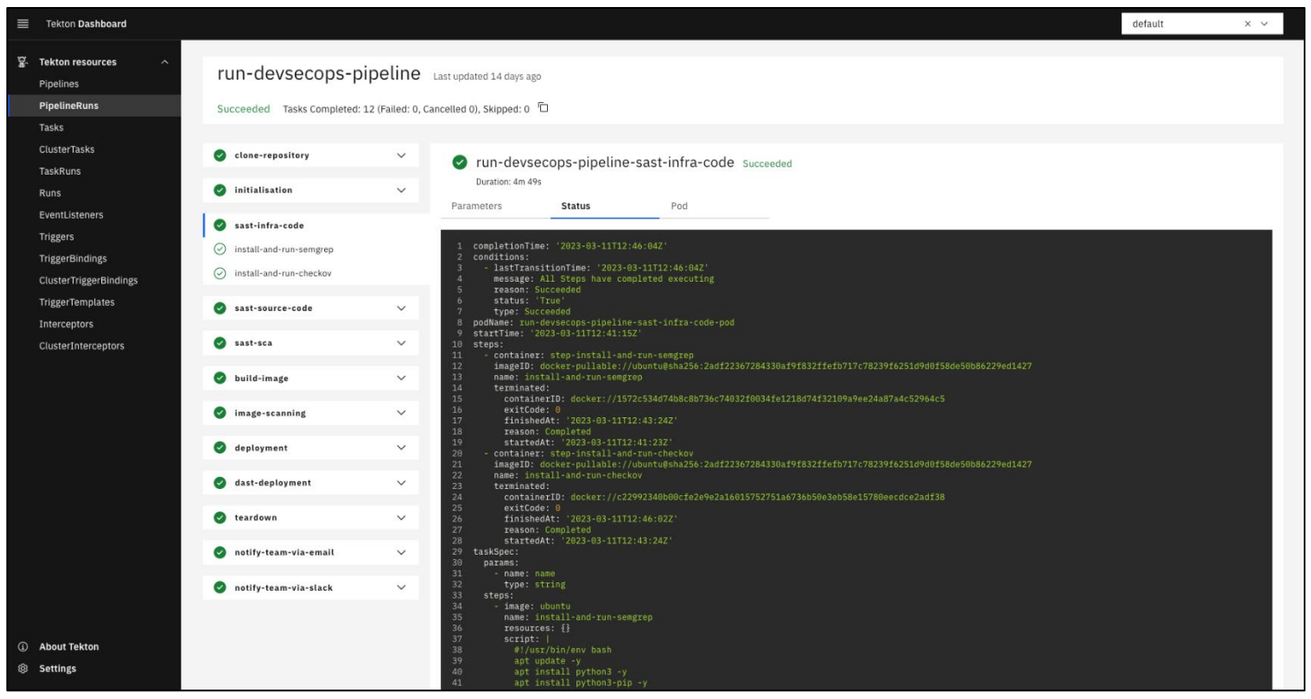


Remediation:

We facilitate quicker remediation of any software errors and bugs found through reports generated at the end of each test and centralising them in a common location for easy access.

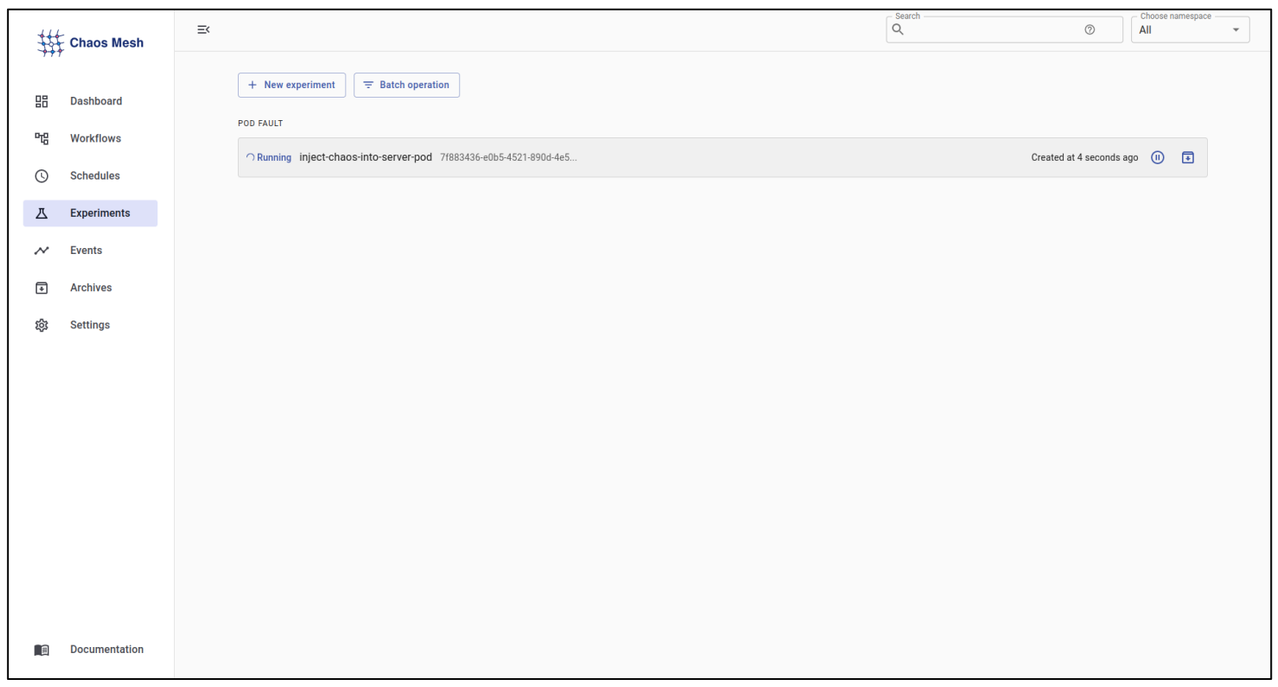
Automation:

Tekton is used to automate security and load testing solutions while also providing means of running them manually on an ad-hoc basis.



Observability:

Majority of our testing solutions offer aesthetic dashboards for you to oversee testing execution, management and control.



Project Objectives:

Kubernetes is a popular platform for managing containerized applications in modern cloud environments. However, as organizations increasingly rely on Kubernetes to run critical workloads, ensuring the security and reliability of these deployments becomes paramount. This project aims to address these challenges by employing a comprehensive testing approach that combines load testing, security testing via DevSecOps, and chaos testing to detect and remediate potential vulnerabilities and weaknesses in Kubernetes deployments.