

HPC SECURITY DASHBOARD

VIT, Vellore

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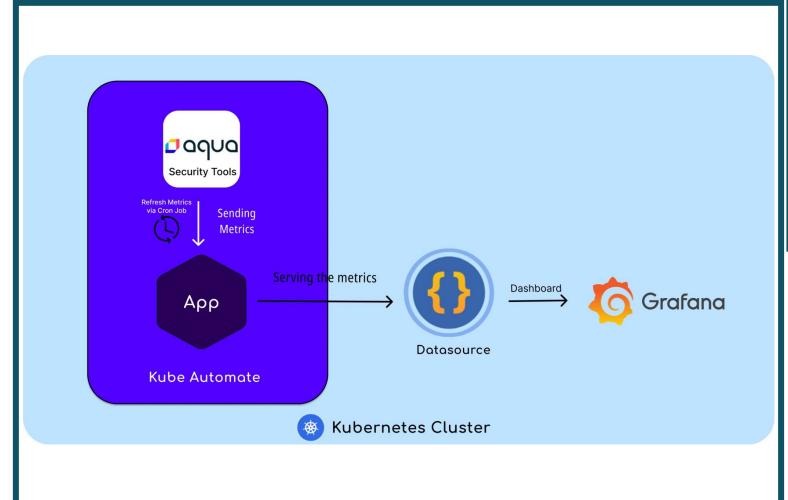
CTY Mentor – HPE: Rao, Yarlagadda Srinivasa (Vasu)

VIT Mentor: Ruby D.

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PROJECT ARCHITECTURE, OBJECTIVES AND WORK-DONE

Architecture (Diagram below)



Objectives

- Understanding kubernetes
- Gather CIS benchmark reports for the kubernetes cluster
- Parse these metrics to visualize in a consolidated Grafana Dashboard

Status

- We got a complete understanding of kubernetes and its security aspects
- Metrics are being updated at specific time intervals
- A consolidated Grafana Dashboard has been generated from the metrics

PROJECT PLAN, LEARNINGS, CHALLENGES

Hands-on Kubernetes Exporter & Metrics

Kube Bench & Trivy

Open Source Contribution

Learnings:

- Comprehensive study on kubernetes and its various benchmarks
- Focus on Aqua Security tools(Kube Bench & Trivy)
- Kubernetes Logging, YAML files and Helm Charts
- Security metrics
- Grafana Dashboard

Challenges:

- New Domain
- Hardware Constraint

DEMO AND NEXT STEPS

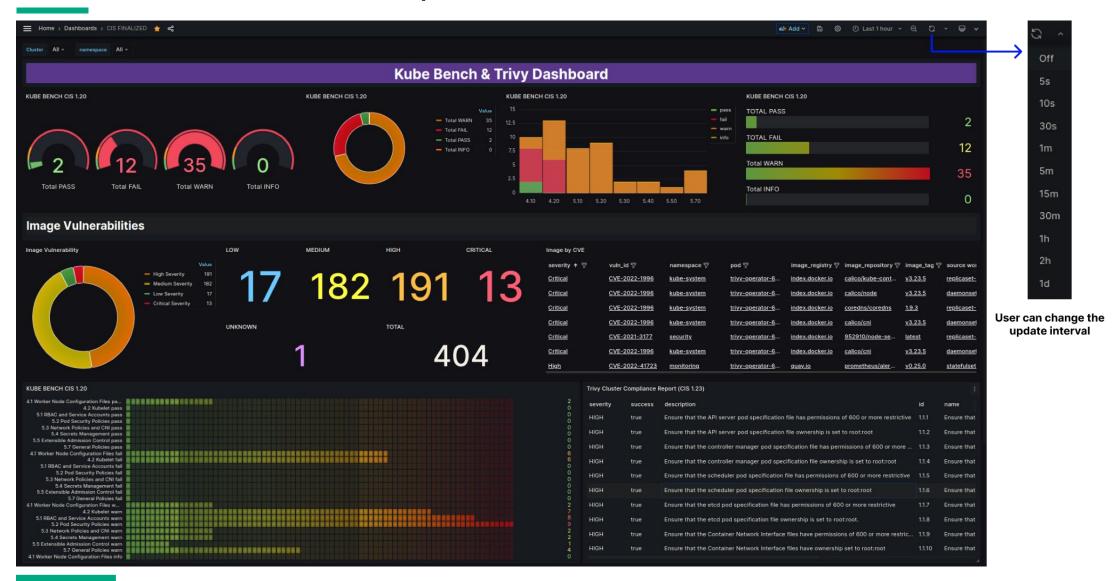
Demo Objective

- Source code Acquisition
- Automated script to install the tools and export the enhanced metrics
- Grafana Dashboard Visualization

Next Steps

Contribute back to the open source community

Grafana Dashboard Snapshot



THANK YOU