



Hewlett Packard
Enterprise

HPC SECURITY DASHBOARD

VIT, Vellore

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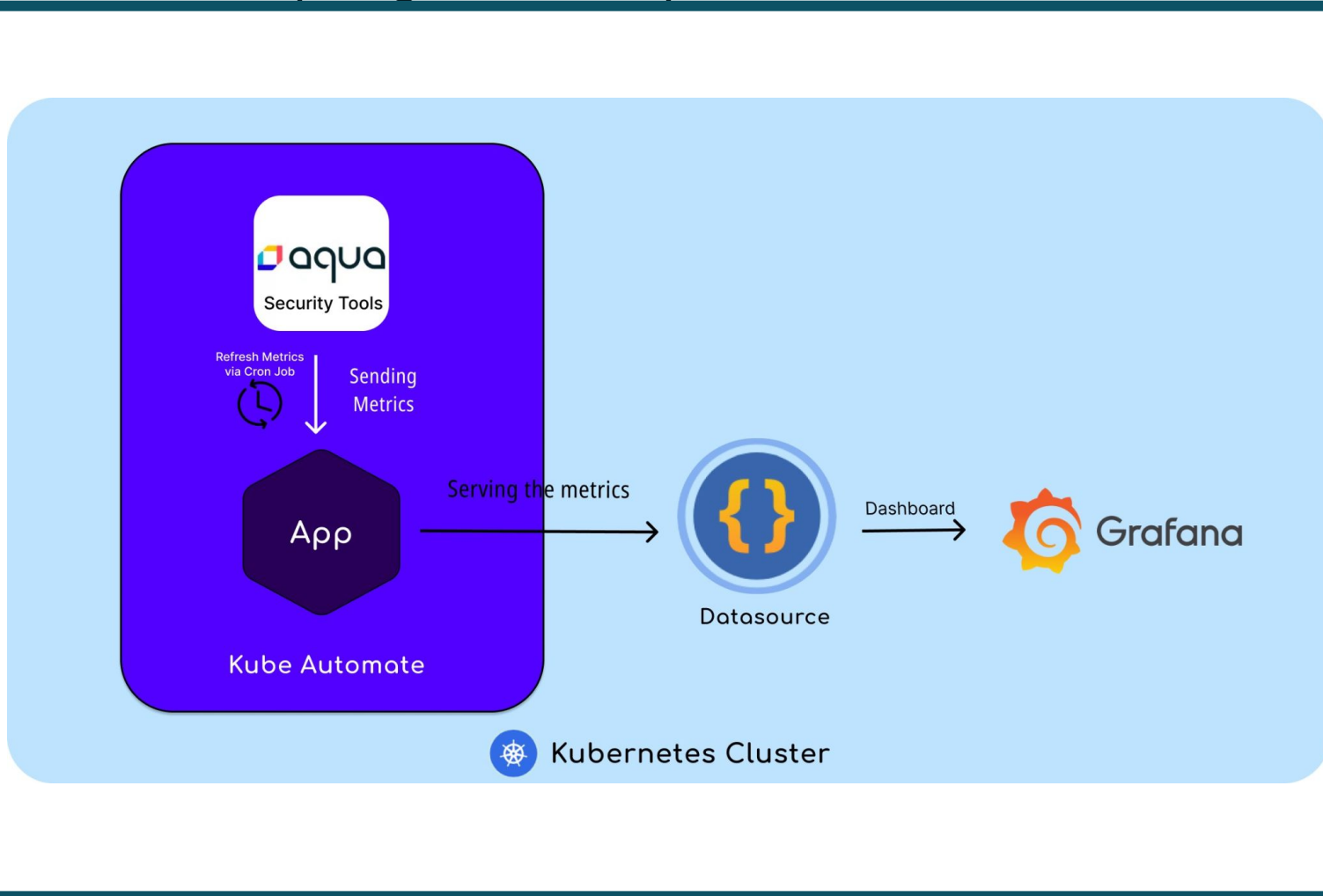
CTY Mentor – HPE : Rao, Yarlagadda Srinivasa (Vasu)

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



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



- Off
- 5s
- 10s
- 30s
- 1m
- 5m
- 15m
- 30m
- 1h
- 2h
- 1d

User can change the update interval

THANK YOU

