# White Paper: Grafana & Prometheus on HPE GreenLake with NVIDIA

### Introduction

This document provides a technical overview and deployment guide for Grafana and Prometheus in HPE GreenLake environments with NVIDIA hardware.

### **Table of Contents**

- Installation
- Configuration
- Troubleshooting
- References

## Installation

The repo has many prometheus related charts. The chart we want is called "kube-prometheus-stack". This chart also includes sub-chart of grafana.

## Add repo

#### Install

```
helm install kube-prometheus-stack

→ prometheus-community/kube-prometheus-stack --namespace monitoring

→ --create-namespace
```

# **Helm Search Output**

```
prometheus-community/alertmanager 1.24.0 \leftrightarrow v0.28.1 The Alertmanager handles alerts sent by client ... prometheus-community/alertmanager-snmp-notifier 2.0.1 \leftrightarrow v2.0.0 The SNMP Notifier handles alerts coming from Pr...
```

#### alt text

### Figure 1: alt text

```
prometheus-community/jiralert
                                                        1.8.1
                                                                        v1.3.0
→ A Helm chart for Kubernetes to install jiralert
prometheus-community/kube-prometheus-stack
                                                         76.3.0
                    kube-prometheus-stack collects Kubernetes manif...

    ∨0.84.1

prometheus-community/kube-state-metrics
                                                         6.1.4
                    Install kube-state-metrics to generate and expo...

→ 2.16.0

prometheus-community/prom-label-proxy
                                                         0.15.0

    ∨0.12.0

                    A proxy that enforces a given label in a given ...
                                                         27.30.0
prometheus-community/prometheus

    ∨3.5.0

                    Prometheus is a monitoring system and time seri...
prometheus-community/prometheus-adapter
                                                         5.1.0

    ∨0.12.0

                    A Helm chart for k8s prometheus adapter
```

[!Note] Was trying to configure grafana to be NodePort but got confused for a long time why "show value" for chart don't show the grafana.service.type while the installed release shows. The "show value" only shows parent prometheus value while "get values" show the merged values after installation.

Was trying to configure grafana to be NodePort but got confused for a long time why "show value" for chart don't show the grafana.service.type while the installed release shows. The "show value" only shows parent prometheus value while "get values" show the merged values after installation.

Continue to add sections as you curate your notes.