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.

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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

helm repo add prometheus-community https://prometheus-community.github.io/helm-charts helm repo update

Install

helm install kube-prometheus-stack prometheus-community/kube-prometheus-stack --namespace

→ monitoring --create-namespace

Helm Search Output

prometheus-community/alertmanager	1.24.0	v0.28.1	The
\hookrightarrow Alertmanager handles alerts sent by client			
prometheus-community/alertmanager-snmp-notifier	2.0.1	v2.0.0	The SNMP
→ Notifier handles alerts coming from Pr			
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	v0.84.1	
prometheus-community/kube-state-metrics	6.1.4	2.16.0	Install
→ kube-state-metrics to generate and expo			

prometheus-community/prom-label-proxy	0.15.0	v0.12.0	A proxy
\hookrightarrow that enforces a given label in a given \dots			
prometheus-community/prometheus	27.30.0	v3.5.0	
\hookrightarrow Prometheus is a monitoring system and time seri			
prometheus-community/prometheus-adapter	5.1.0	v0.12.0	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.

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Figure 1: alt text

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