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# Monitoring HPE GreenLake Servers running GPU using Grafana and Prometheus

## Overview

HPE GreenLake provides a cloud-native platform for managing and monitoring infrastructure with built-in tools and dashboards. While GreenLake offers comprehensive native monitoring capabilities, organizations can also leverage the GreenLake API to integrate with popular open-source tools like Grafana and Prometheus. This approach enables teams to consolidate monitoring data across hybrid environments, utilize existing observability workflows, and create customized dashboards tailored to specific operational needs.

## Kubernetes and Helm Setup

### Environment Verification

Before proceeding with the monitoring setup, verify that your Kubernetes cluster has the necessary components installed. The following shows a working environment with the GPU Operator and Prometheus monitoring stack deployed:

**Services running in the `gpu-operator` namespace:** - `gpu-operator`: Core service for GPU management (ClusterIP: 10.233.44.80:8080) - `nvidia-dcgm-exporter`: DCGM metrics exporter for Prometheus integration (ClusterIP: 10.233.15.59:9400)

**Helm releases:** - `gpu-operator-1753140595` (v25.3.2) in the `gpu-operator` namespace - `kube-prometheus-stack` (76.3.0) in the `monitoring` namespace

You can verify your setup using the following commands:

wsl=> k get svc -n gpu-operator					
NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
gpu-operator	ClusterIP	10.233.44.80	<none>	8080/TCP	78d
nvidia-dcgm-exporter	ClusterIP	10.233.15.59	<none>	9400/TCP	78d
wsl=> helm list -A					
NAME	NAMESPACE	REVISION	UPDATED	APP	
VERSION		STATUS	CHART		
gpu-operator-1753140595	gpu-operator	4	2025-08-14 19:20:42.329819669	-0700	
MST deployed	gpu-operator-v25.3.2		v25.3.2		
kube-prometheus-stack	monitoring	5	2025-08-15 13:06:31.169338089	-0700	
MST deployed	kube-prometheus-stack-76.3.0		v0.84.1		
hjma@HSTHJMA02:~					

**Note**

this is important