Enable Advanced Monitoring

Unit #4.3.1

Enable Advanced Monitoring

The cluster overview page for the cluster shows some basic red/green status information, but for true insight into the Kubernetes cluster, enable advanced monitoring from this screen.

Advanced monitoring deploys Prometheus and Grafana, and the worker nodes will need to have enough resources to accommodate the extra load. Recommended CPU and memory sizes are available in the Rancher documentation.

Prometheus Configuration

Advanced monitoring is delivered by Prometheus, and there are a number of options available that control how the monitoring pods behave.

In addition to the standard memory and CPU reservation and limits, consider the following options for your cluster:

- Data retention period - How long Prometheus retains data scraped from Rancher objects before purging it
- Persistent Storage for Prometheus and Grafana - With persistent storage enabled and a storage class selected, the collected data will survive beyond the life of the Pod with which it is collected.
- Node Exporter configuration - The Node Exporter enables Prometheus to monitor the host on which it's running. This component requires that the pod run with hostNetwork: true, and that you enable a port on which it can listen that doesn't conflict with other services running on the host.
- Selectors and Tolerations - These configure where the monitoring workloads will be deployed.

References

Integrating Rancher and Prometheus - https://rancher.com/docs/rancher/v2.x/en/cluster-admin/tools/monitoring/