



This PDF is generated from authoritative online content, and is provided for convenience only. This PDF cannot be used for legal purposes. For authoritative understanding of what is and is not supported, always use the online content. To copy code samples, always use the online content.

Operations

System metrics

Contents

- 1 Kubernetes and Node metrics
- 2 Kubernetes metrics
- 3 Node metrics

Find useful metrics provided by Kubernetes and other system resources to monitor the status and performance of the cluster and nodes.

Related documentation:

-
-

RSS:

- [For private edition](#)

Kubernetes and Node metrics

In addition to the service-defined metrics described in the service-level guides (see links here), standard Kubernetes and other system metrics are obviously important for monitoring the status and performance of your cluster(s), nodes, and services.

- [Kubernetes metrics](#)
- [Node metrics](#)

Kubernetes metrics

For full information about all the cluster metrics Kubernetes provides, see the [Kubernetes documentation](#). Genesys recommends that you pay attention to the following cluster-related metrics in particular.

Metric	Prometheus formula	Indicator of
Pod Restarts	<code>increase(kube_pod_container_status_restarts_total{namespace="\$namespace", pod=~"\$service.*"})[1m]</code>	
The cgroup's total memory	<code>sum(container_memory_usage_bytes{namespace="\$namespace", pod=~"\$service-.*", container!=""}) by (pod)</code>	Memory
The cgroup's CPU usage	<code>sum (rate (container_cpu_usage_seconds_total{namespace="\$namespace", pod=~"\$service-.*", container!="POD"}[1m])) by (pod) * 100</code>	CPU utilization
Bytes transmitted over the network by the container	<code>rate(container_network_transmit_bytes_total{namespace="\$namespace", pod=~"\$service-.*", container!=""}[1m])</code>	
Bytes received over the network by the container	<code>rate(container_network_receive_bytes_total{namespace="\$namespace", pod=~"\$service-.*", container!=""}[1m])</code>	

Node metrics

Genesys recommends that you pay attention to the following node-related metrics in particular.

Metric	Prometheus formula	Indicator of
Process HEAP All	<code>{SERVICE_NAME}_process_heap_bytes{pod=~"\$pod",service="\$service"}</code>	Heap data
Process CPU All	<code>sum(rate({SERVICE_NAME}_process_cpu_seconds_total{pod=~"\$pod",service="\$service"} * 100) by (pod))</code>	CPU utilization
Process Memory All: resident memory	<code>{SERVICE_NAME}_process_resident_memory_bytes{pod=~"\$pod",service="\$service"}</code>	Memory
Process Memory All: virtual memory	<code>{SERVICE_NAME}_process_virtual_memory_bytes{pod=~"\$pod",service="\$service"}</code>	Memory