**DQL Time-Series Queries for Operational Monitoring**

<https://docs.dynatrace.com/docs/discover-dynatrace/references/dynatrace-query-language/commands/metric-commands>

**1️.Basic CPU Usage Queries**

**📍** Fetch Average CPU Usage Across All Hosts

timeseries usage = avg(dt.host.cpu.usage)

📍 Fetch CPU Usage Grouped by AWS Region & Host

timeseries cpu\_usage = avg(dt.host.cpu.usage), by:{aws.region, host.name}

* Retrieves **average CPU usage**.
* Groups by **AWS region and host name**.

📍 Fetch CPU Usage for AWS us-east-1 Region

timeseries cpu\_usage = avg(dt.host.cpu.usage), by:{aws.region, host.name}

| filter aws.region == "us-east-1"

📍 Fetch CPU Usage for Hosts Matching "i-0" in Name

timeseries cpu\_usage = avg(dt.host.cpu.usage), filter: contains(host.name,"i-0"), by:{aws.region, host.name}

 Retrieves **average CPU usage**.

 Filters for **hosts where the name contains "i-0"**.

📍 Fetch CPU Usage for a Specific Host

timeseries cpu\_usage = avg(dt.host.cpu.usage), by: {aws.region, host.name}

| filter host.name == "i-061c82f7d0e098b13"

**Advanced CPU Usage Queries**

**📍 Fetch Minimum CPU Usage per Host**

timeseries min=min(dt.host.cpu.usage), by:{dt.entity.host}

**📍 Fetch Top 20 Hosts with Highest CPU Usage**

timeseries usage = avg(dt.host.cpu.usage), by:{dt.entity.host}

| sort usage desc

| fieldsAdd entityName(dt.entity.host)

| limit 20

**📍 Fetch Memory Usage Per Host**

timeseries memory\_usage = avg(dt.host.mem.usage), by:{dt.entity.host}

📍 Fetch Top 10 Hosts with Highest Memory Consumption

timeseries memory\_usage = avg(dt.host.mem.usage), by:{dt.entity.host}

| sort memory\_usage desc

| limit 10

**Kubernetes Resource Monitoring**

**📍 Fetch Kubernetes CPU Requests & Allocatable CPU**

timeseries requests\_cpu = avg(dt.kubernetes.container.requests\_cpu),

allocatable\_cpu = avg(dt.kubernetes.node.cpu\_allocatable),

by: {k8s.cluster.name, k8s.node.name}

 Retrieves **average requested CPU**.

 Retrieves **total allocatable CPU per node**.

 Groups by **Kubernetes cluster and node name**.

📍 Fetch Kubernetes Pod Restarts Over Time

timeseries pod\_restarts = count(dt.kubernetes.container.restarts), by:{k8s.cluster.name, k8s.pod.name}

* Counts **number of pod restarts** over time.

📍 Fetch Top 5 Hosts with Highest Disk Read Operations

timeseries disk\_read = avg(dt.host.disk.read), by:{dt.entity.host}

| sort disk\_read desc

| limit 5

**Disk Usage Monitoring**

**📍 Fetch Available Disk Space per Host & Disk**

timeseries avg(dt.host.disk.avail), by:{dt.entity.host, dt.entity.disk}

Retrieves **average available disk space** per host and disk.