**DogStatsD AdmissionReview Metrics Setup Guide**

### ****1. Prerequisites****

* Linux system with Python 3.8+
* Datadog Agent installed with DogStatsD enabled
* Flask & Datadog Python SDK

### ****2. Install Datadog Agent with DogStatsD****

DD\_AGENT\_MAJOR\_VERSION=7 DD\_API\_KEY=YOUR\_API\_KEY DD\_SITE="datadoghq.com" bash -c "$(curl -L https://s3.amazonaws.com/dd-agent/scripts/install\_script.sh)"

Enable DogStatsD in /etc/datadog-agent/datadog.yaml:

use\_dogstatsd: true

dogstatsd\_listen\_address: "127.0.0.1"

Restart Datadog Agent:

sudo systemctl restart datadog-agent

### ****3. Install Python Dependencies****

pip install flask datadog

### ****4. Python Script for AdmissionReview Metrics****

from flask import Flask, request, jsonify

from datadog import DogStatsd

import time

app = Flask(\_\_name\_\_)

statsd = DogStatsd(host="127.0.0.1", port=8125)

@app.route("/validate", methods=["POST"])

def validate():

start\_time = time.time()

try:

admission\_request = request.get\_json()

admission\_response = {"response": {"uid": admission\_request["request"]["uid"], "allowed": True}}

response\_code = 200

statsd.increment("admissionreview.http\_response\_status", tags=[f"status\_code:{response\_code}"])

except Exception as e:

response\_code = 500

statsd.increment("admissionreview.http\_response\_status", tags=["status\_code:500"])

admission\_response = {"error": str(e)}

statsd.histogram("admissionreview.response\_time", time.time() - start\_time)

return jsonify(admission\_response), response\_code

if \_\_name\_\_ == "\_\_main\_\_":

app.run(host="0.0.0.0", port=5000)

### ****5. Run the Script****

python admissionreview\_metrics.py

### ****6. Verify Datadog Metrics****

datadog-agent status | grep admissionreview

sudo journalctl -u datadog-agent -f | grep "admissionreview"

### ****7. Test AdmissionReview API****

curl -X POST http://localhost:5000/validate -H "Content-Type: application/json" -d '{"apiVersion": "admission.k8s.io/v1", "kind": "AdmissionReview", "request": {"uid": "1234", "object": {}}}'

### ****8. Deploy in Kubernetes****

apiVersion: apps/v1

kind: Deployment

metadata:

name: admissionreview-metrics

spec:

replicas: 1

selector:

matchLabels:

app: admissionreview-metrics

template:

metadata:

labels:

app: admissionreview-metrics

spec:

containers:

- name: admissionreview-metrics

image: myrepo/admission-metrics:latest

ports:

- containerPort: 5000

env:

- name: DD\_AGENT\_HOST

value: "127.0.0.1"

- name: DD\_DOGSTATSD\_PORT

value: "8125"

### ****9. Create Datadog Dashboard****

1. Metric: admissionreview.http\_response\_status
2. Metric: admissionreview.response\_time
3. Filter by status\_code