### **How to Find Which Process is Using the Most Open File Descriptors in Datadog**

As a **Datadog Expert**, here’s how you can **leverage existing Datadog features** to identify processes consuming the most **open file descriptors**.

## **Step 1: Enable Process Monitoring in Datadog**

To monitor **open file descriptors per process**, ensure **Live Process Monitoring** is enabled.

### **Verify if Process Monitoring is Already Enabled**

Run the following command to check if **process monitoring** is active:

sh

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sudo datadog-agent status | grep "process"

If it’s **not enabled**, follow these steps:

### **Enable Process Monitoring**

Edit the **Datadog Agent config file**:  
sh  
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sudo nano /etc/datadog-agent/datadog.yaml

Find the process\_config section and modify it:  
yaml  
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process\_config:

enabled: "true"

process\_collection: "true"

Restart the Datadog Agent:  
sh  
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sudo systemctl restart datadog-agent

## **Step 2: View Per-Process Open File Descriptor Usage in Datadog UI**

1. **Go to Datadog UI**:
   * Navigate to **Live Processes** → Datadog Live Process Monitoring.
2. **Filter for Open File Descriptors**:

In the search bar, enter:  
text  
CopyEdit  
process.open\_file\_descriptors

* + This will show processes sorted by the number of open file descriptors.

1. **Sort by "Open File Descriptors"**:
   * Click on the process.open\_file\_descriptors column.
   * Identify processes with **high usage**.
2. **Drill Down into a Specific Process**:
   * Click on a process to see:
     + Command line arguments (process.command)
     + Memory & CPU usage
     + **Open file descriptor trends over time**

## **Step 3: Create a Dashboard to Continuously Track Open File Descriptors**

You can create a **Datadog Dashboard** to visualize processes with high open file descriptor usage.

### **Add a "Top List" Widget**

1. **Go to Datadog → Dashboards → New Dashboard**.
2. **Click "Add Widget" → Select "Top List"**.

**Use this query**:  
text  
CopyEdit  
avg:process.open\_file\_descriptors{\*} by {process\_name}

1. **Title:** "Processes with Most Open File Descriptors"
2. **Save the Widget.**

## **Step 4: Set Up an Alert for High Open File Descriptor Usage**

To prevent **file descriptor exhaustion**, create a **Datadog monitor**.

### **Create a New Monitor**

1. **Go to "Monitors" → "New Monitor"**.
2. **Select "Metric Monitor"**.

**Enter the query**:  
text  
CopyEdit  
process.open\_file\_descriptors{\*} by {process\_name}

1. **Set Alert Conditions**:
   * **Warning:** > 5000 open file descriptors
   * **Critical:** > 8000 open file descriptors
2. **Configure Notifications (Slack, Email, PagerDuty, etc.)**.
3. **Save and Activate**.

## **Step 5: Use Log Management for Further Investigation (Optional)**

If you want **detailed logging** of which files a process has open:

1. **Enable Datadog Log Collection**

In datadog.yaml:  
yaml  
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logs\_enabled: true

Restart the agent:  
sh  
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sudo systemctl restart datadog-agent

1. **Filter Logs for High Open File Usage**
   * Go to **Datadog → Logs**.

Search:  
text  
CopyEdit  
process\_name:your\_app AND process.open\_file\_descriptors:\*

* + Identify if a **specific file** is causing excessive usage.