

IR Missing from Metric Dimension Values in Azure Monitor

Last updated by | Anil K B | Mar 9, 2023 at 12:57 AM PST

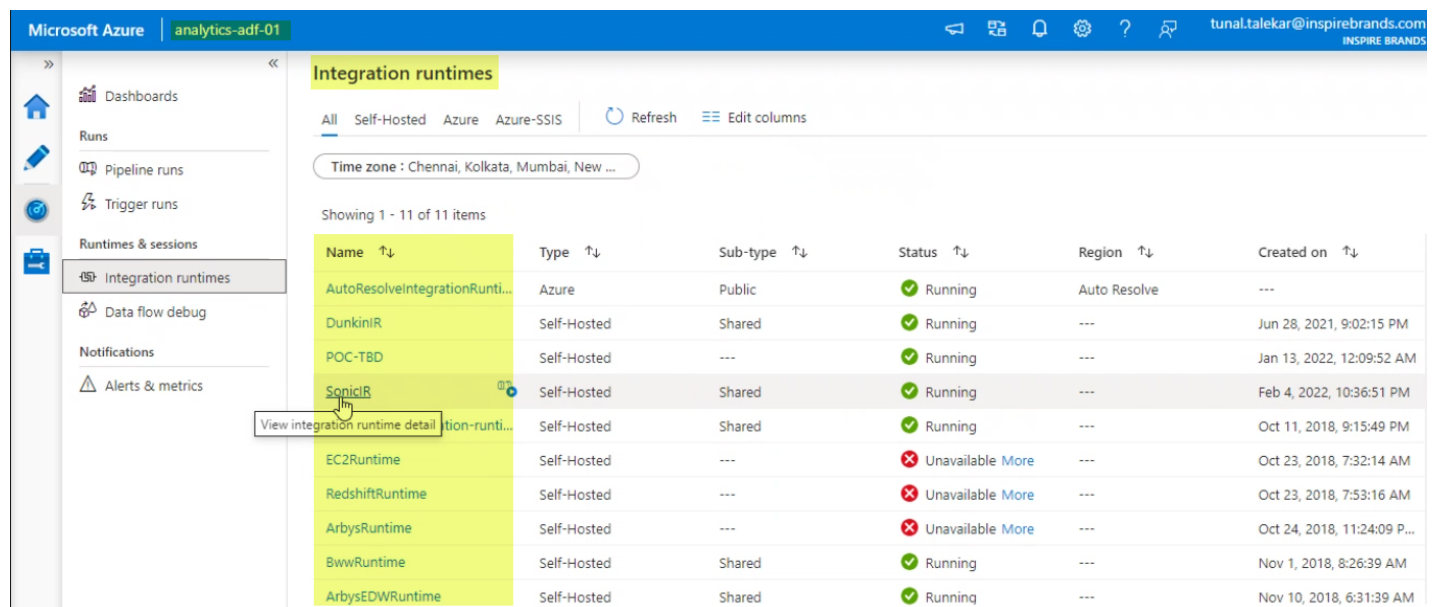
Contents

- [Issue Summary:](#)
- [Analysis:](#)
- [Root Cause:](#)
- [Mitigation applied:](#)
- [Note:](#)

Issue Summary:

User wasn't able to setup **Metric Alerts** that show ALL of the Integration Runtimes(SHIR) that they have (in a particular ADF resource instance).

- Below is the screenshot of the existing ADF - showing 10 Integration runtimes



| Name | Type | Sub-type | Status | Region | Created on |
|--------------------------------|-------------|----------|-------------|--------------|-----------------------------|
| AutoResolveIntegrationRunti... | Azure | Public | Running | Auto Resolve | --- |
| DunkiniR | Self-Hosted | Shared | Running | --- | Jun 28, 2021, 9:02:15 PM |
| POC-TBD | Self-Hosted | --- | Running | --- | Jan 13, 2022, 12:09:52 AM |
| SonicIR | Self-Hosted | Shared | Running | --- | Feb 4, 2022, 10:36:51 PM |
| Self-Hosted | Self-Hosted | Shared | Running | --- | Oct 11, 2018, 9:15:49 PM |
| EC2Runtime | Self-Hosted | --- | Unavailable | --- | Oct 23, 2018, 7:32:14 AM |
| RedshiftRuntime | Self-Hosted | --- | Unavailable | --- | Oct 23, 2018, 7:53:16 AM |
| ArbysRuntime | Self-Hosted | --- | Unavailable | --- | Oct 24, 2018, 11:24:09 P... |
| BwwRuntime | Self-Hosted | Shared | Running | --- | Nov 1, 2018, 8:26:39 AM |
| ArbysEDWRuntime | Self-Hosted | Shared | Running | --- | Nov 10, 2018, 6:31:39 AM |

- And below, in their Portal - setting up an Alert - and setting the Dimension name (using Integration Runtime) with Azure Monitor- it only shows 3 IR names in the drop-down list.

Home > Monitor | Alerts > Alert rules >

Create an alert rule

| Dimension name | Operator | Dimension values | Include all future values |
|---------------------|----------|---|-------------------------------------|
| Integration Runtime | = | 3 selected | <input checked="" type="checkbox"/> |
| Select dimension | = | <input type="text" value="Type to start filtering..."/> | <input type="checkbox"/> |

Alert logic

Threshold ⓘ

Aggregation type ⓘ

Operator ⓘ

Unit ⓘ

☒ Static

☐ Dynamic

Average

Greater than

B

☒ Select all

☒ DunkinIR

☒ POC-TBD

☒ SonicIR

Aggregation ⓘ
Average

Select dimension name ⓘ
IntegrationRuntimeName

Apply splitting on dimension name ⓘ ☒

Top ⓘ
10

Sort ⓘ
None

Apply filter on dimension value ⓘ ☒

Apply advanced filters ⓘ ☐

[Click to view metric data or apply additional filter](#)

Apply Filter

Selected dimension name ⓘ
IntegrationRuntimeName

Select filter operator ⓘ
eq

Select dimension value ⓘ
SonicIR

SonicIR
DunkinIR
POC-TBD

Analysis:

- During our troubleshooting session, we observed that the issue doesn't rely with the Azure Data factory Monitor Alerts.
- The same alert and metric from ADF Portal studio when created, was able to list all Self Hosted IR's in the drop-down list, which is nothing but the integrated Azure Monitor, as shown below.

The screenshot shows the Azure Monitor interface for the resource 'analytics-adf-01'. On the left, the 'Alerts & metrics' section is active, displaying a table of alerts. The table has columns for 'ALERT', 'ENABLED', 'RESOURCE TYPE', 'RESOURCES', and 'ACTIONS'. The alerts listed are 'Personalization' (On), 'Personalization' (Off), 'POC_TBD_IR nr' (On), and 'MS_POC_TBD_I' (On). On the right, the 'Configure alert logic' panel is open. It shows the 'IntegrationRuntimeName' dimension with a dropdown menu. The dropdown menu is open, showing a list of values: 'Select all', 'ArbysRuntime', 'AzureHosted-CentralUS', 'BwwRuntime', 'DunkiniR', 'EC2Runtime', and 'POC-TBD'. The 'Alert logic' section shows a condition of 'Greater than', a time aggregation of 'Total', and a threshold count of '0'. The 'Evaluate based on' section is empty.

- The issue comes when we try to create the alert metric from Azure Monitor on Portal, which is not able to fetch all IR list from ADF or it could be either the UI issue on Azure Monitor Upfront.
- Collab was created with Azure Monitor Team.

Root Cause:

- The issue is caused by a backend code bug, [SHIR loses metrics after factory move resource group or subscription](#) as follows: Move factory resource doesn't update SHIR resource URI, resulting in data dirty and metrics cannot write to the right resource URI, which thus used by Azure Monitor.
- Which means, once the user moved this factory analytics-adf-01 from "/subscriptions/<subscription-guid>/resourceGroups/analytics-platform-01" to "/subscriptions/<subscription-guid>/resourceGroups/Polaris-RG", due to above bug, these SHIRs' resource URI is not refreshed to the new resource URI, leading to data corruption.
- Other 4 SHIRs, which are reflected on Azure Monitor Metric list, were created after factory movement so their resource URIs are correct, and they have metrics written to MDM, hence used by Azure Monitor.

Mitigation applied:

- Product Group had fixed all the data corruption of missing reported SHIRs in the backend for the user, so the issue was mitigated.

Note:

- In case you migrate the data factory resource again and observe this behavior again over Azure Monitor over SHIR alerts, it would be the reason of this ongoing bug and till it resolves, the temporary workaround is to re-create the SHIR post instance migration.

Additional Information

- Icm References:
- cases: 2209290030001649001
- Author: **slalwani**
- Reviewer: **kbanil**

How good have you found this content?

