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Metrics

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Self-help content presented in Azure Portal

Resolve Metrics issues with Managed Instance

Fix this problem now using our expert solution

Expert solutions are written by Azure engineers to help you quickly resolve the problem on your own.

The Azure portal enables monitoring of resource metrics for your Managed Instance. You can quickly monitor a variety of resource metrics, enabling you to see resource consumption at any given moment.

You can configure diagnostic settings to <u>stream categories of metrics and resource logs</u> of for managed instances to one of the following Azure resources.

- Log Analytics ☑
 - ∘ Can be consumed by <u>SQL Analytics</u> ☑
 - Leverage other Azure Monitor features such as alerts and visualizations
- Azure Event Hubs [2]
 - Stream logs to third-party logging and telemetry systems
 - Build a custom telemetry and logging platform
 - View service health by streaming data to Power BI
- Azure Storage ☑
 - Store data for longer periods
 - Low cost storage

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You can enable and manage metrics and diagnostic telemetry logging by using one of the following methods:

- Azure portal
- PowerShell
- Azure CLI
- Azure Monitor REST API
- Azure Resource Manager template

There are periods where CPU\IO is reaching 100%, what is causing it?

- You can also use **Query Store** ☑ to identify and tune top resource consuming queries
- Try <u>Azure SQL Analytics</u>
 □ to see if the high resource usage is due to the workload

Export the metrics outside Azure

- The metrics can be <u>stream</u>

 ☐ to Azure Event Hubs and Azure Storage from where they can be sent to outside of Azure
- On the Metrics tab you can download the metrics presented to Excel, just select 'Share -> Download to Excel'
- Use <u>REST API</u> or <u>Powershell</u> to obtain the value of the metric you want to.

Cant see the metrics graph on Azure Portal

- Confirm that the database is processing enough workload to consume resources.
- Workaround: Monitor Performance using DMVs [2] (for Elastic Pools [2]), Powershell [2] or REST API [2]
- On lower service tiers, the component responsible for uploading metrics can hit resource limit and stop uploading metrics. Try scaling to a higher service tier then scale back to the original service tier.
- Confirm that the resource provider Microsoft. Insights is registered on your subscription \(\mathbb{Z} \)
- The user must be a member of <u>monitoring reader</u> ☑, <u>monitoring contributor</u> ☑, or <u>contributor</u> ☑ to explore metrics for any resource.
- Validate if the chart was edited and the <u>y-axis was locked on a specific boundary</u> \(\textsquare

Cant see all the data in the graph

- In Azure portal we can only query for no more than 30 days worth of data on any single chart. This
 limitation doesn't apply to <u>log-based metrics</u> ☑.
 Verify that the difference between start- and end- dates in the time picker doesn't exceed the 30-day
 interval.
- Validate if the chart was edited and the <u>y-axis was locked on a specific boundary</u>

'Error retrieving data' message on dashboard

• This problem may happen when your dashboard was created with a metric that was later deprecated and removed from Azure. To verify that it is the case, open the Metrics tab of your resource, and check the available metrics in the metric picker. Update the failing tile by picking an alternative metric for your chart on dashboard.

Chart shows dashed line

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 Azure metrics charts use dashed line style to indicate that there is a missing value (also known as 'null value') between two known time grain data points. The dashed line drops down to zero when the metric uses count and sum aggregation. For the avg, min or max aggregations, the dashed line connects two nearest known data points.

The dashed line makes reading of these charts easier but if your chart is still unclear, consider viewing your metrics with a different chart type.

Chart shows unexpected drop in values

• In many cases, the perceived drop in the metric values is a misunderstanding of the data shown on the chart. You can be misled by a drop in sums or counts when the chart shows the most-recent minutes because the last metric data points havent been received or processed by Azure yet.

Recommended resources

Platform metrics: Databases □

• Platform metrics: Elastic pools 🖸

• Platform metrics: Managed Instances

• Azure Monitoring REST API walkthrough

- Troubleshooting metrics charts [2]
- Getting started with Azure Metrics Explorer [2]
- Video <u>Performance Monitoring for Azure SQL Managed Instance with Azure SQL Analytics</u> ☑ (<u>Previous video about Azure SQL Analytics</u> ☑)

How good have you found this content?



