Metrics Limits

To ensure that you see the metric information that is most relevant to your application, agents have limits for the number of metrics they can store. Different limits apply to app agents and machine agents, as follows:

- For an app agent, the default maximum number of registered metrics is 5000.
- For the Standalone Machine Agent, the default maximum number of registered metrics is 450. This includes both basic hardware metrics and the expanded metrics available with Server Visibility.

If the limit is reached, an error event is generated of type `AGENT_METRIC_REG_LIMIT_REACHED` with a summary of *Metric registration limit of n reached*. No new metrics are created until the agent restarts. You can increase the default limit if necessary, as described next.

Agent Metric Limits

You can increase or decrease the default metric registration limits for machine agents or app agents.

> ⊘ Changing these limits can affect the resource consumption of your deployment. Before you change this setting verify your application environment and Controller can handle the increased resource requirements.

For the Java agent, modify the limit using the `agent.maxMetrics` system property. For example, to increase the machine agent metric limit, specify the maximum number of metrics as an argument when starting the machine agent in the following format:

```
-Dappdynamics.agent.maxMetrics=<max-number-of-metrics>
```

For example, when starting the machine agent, increase the maximum number of metrics that can be registered to 2000 as follows:

```
nohup java -Dappdynamics.agent.maxMetrics=2000 -jar machineagent.jar &
```

For the .NET Agent, set the `maxMetrics` property as an environment variable. This setting only affects the app agent. For example:

```
appdynamics.agent.maxMetrics=5500
```

For the .NET Machine Agent, specify the maximum number of metrics using the Metrics element in the config.xml. See 'Machine Agent Element' on .NET Agent Configuration Properties. See also Administer the .NET Agent.

```
<metrics max-metrics="300"/>
```

Controller Metric Limits

The Controller applies its own limits on metric registration. For an on-premises Controller, you can view and modify the properties that control the metric registration limit in the Controller settings page in the Controller Administration Console.

The relevant Controller settings are:

- `metric.registration.limit`: The maximum number of metrics that can be registered for an account in the Controller. The default is 2 million.
- `application.metric.registration.limit`: The maximum number of metrics that can be registered for a business application in the Controller. The default is 1 million.