

Configuring Docker Visibility

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Machine Agent Settings for Docker Visibility

You can configure the Docker Visibility settings in the file: `<machine-agent-home>/extensions/DockerMonitoring/conf/DockerMonitoring.yml`

 Before you edit this file, please review "Editing YAML Files: Important Notes" in [Machine Agent Settings for Server Visibility](#).

Property	Description	Default
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cgroupEnabled	<p>The Machine Agent can collect Memory and CPU metrics for Docker containers using <code>cgroupdata</code>. This method is much faster than using the Docker API (the default metric-collection method). You can enable <code>cgroupmetriccollection</code> on all platforms except Amazon Linux OS. With the <code>cgroupEnabled</code> flag set to <code>true</code>, the Machine Agent can monitor up to 600 containers per host. When <code>cgroup</code> is enabled, you do not have to update the Docker Metric Collector Pool Size. The max container limit is independent of this.</p> <p>This mode is disabled by default. To enable <code>cgroupmetriccollection</code>, run the agent with the following command-line option set to <code>true</code>:</p> <pre>java -Dappdynamics.docker.container.collection.cgroup.enabled=true -jar machineagent.jar</pre>	true
containerProcessSelectorRegex	<p>The Machine Agent can monitor up to 150 running containers (depending on the pool size configuration, described below). The agent collects metrics from containers with one or more running processes whose command line matches a configurable regex. By default, the value of this regex is <code>".*"</code> and matches all containers irrespective of the processes running in them. If you cannot restart the APM agents, or if you want to filter APM agents based on another command-line argument, you can override this behavior by editing this regex.</p> <p>Default = <code>".*"</code></p>	".*"
docker.metric.collector.pool.size	<p>Specify the local limit for the number of containers the agent can monitor. The effective limit for each agent is the minimum amount for:</p> <ul style="list-style-type: none"> The <code>sim.docker.machine.container.limit</code> on the Controller (default limit = 15 containers), or The Docker Metric Collector Pool Size on the agent (default pool size = 3, or 90 containers). <p>You can change this setting to monitor up to 120 containers (pool size = 4) or 150 containers (pool size = 5). The trade-off is that increasing the pool size might lead to higher resource consumption on the agent host.</p> <p>To change the pool size, set these properties:</p> <ul style="list-style-type: none"> System Property: <code>-Dappdynamics.docker.metric.collector.pool.size</code> Environment Variable: <code>APPDYNAMICS_DOCKER_METRIC_COLLECTOR_POOL_SIZE</code> 	<p>default limit = 15 containers</p> <p>default pool size = 3, or 90 containers</p>
dockerTagsEnabled	<p>Enable (default) or disable the collection of Docker tags from containers monitored by the Machine Agent.</p>	

<pre>docker.use.container.name.selector</pre>	<p>Use the Machine Agent to identify containers by container names only.</p> <p>By default for Docker monitoring, the Machine Agent obtains a list of containers. For each container, the Machine Agent retrieves all running processes inside the container. Then, the Machine Agent matches the container to be monitored by the process full command line. Because there are many containers, the selection process lasts longer than a minute, causing gaps in reporting container metrics.</p> <p>The Docker Use Container Name Selector configuration option provides an alternative way to select containers to be monitored by using the container's name. This option allows the Machine Agent to run significantly faster since the Machine Agent does not have to gather all the processes for each container.</p> <p>To enable matching with the container name, you can either use an environment variable or a JVM property. If both are defined, the environment variable is used.</p> <ul style="list-style-type: none"> • System Property: <code>-Dappdynamics.docker.use.container.name.selector=false</code> • Environment Variable: <code>APPDYNAMICS_DOCKER_USE_CONTAINER_NAME_SELECTOR=false</code> <p>You can select which containers to be monitored by providing the regular expression, <code>containerNameSelectorRegex</code>, to match the container names. By default, the Machine Agent matches all container names. Regular expressions are part of the <code>extensions/DockerMonitoring/conf/DockerMonitoring.yml</code> file.</p> <p>To exclude containers from monitoring, use an environment variable or the JVM property. If both are defined, the environment variable is used.</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <pre># default value ".*(machine-agent machineagent).*" # environment variable export APPDYNAMICS_DOCKER_CONTAINER_NAME_SELECTOR_BLACKLIST_REGEX=".*(machine-agent machineagent).*" # JVM property -Dappdynamics.docker.container.name.selector.blacklist.regex=".*(machine-agent machineagent).*" </pre> </div>	<pre># default value ".*(machine-agent machineagent).*" </pre>
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Controller Settings for Docker Visibility

For information about how to configure these settings, see [Controller Settings for Standalone Machine Agents](#).

Property	Description	Default
<code>sim.docker.apmNode.markHistorical.enabled</code>	Enable or disable the import of Docker tags to the Controller.	true
<code>sim.docker.enabled</code>	Enable the Docker Monitoring feature.	true
<code>sim.docker.machine.container.limit</code>	<p>Global limit for the number of containers that each Machine Agent can monitor. The effective limit for each agent is the minimum of</p> <ul style="list-style-type: none"> • The <code>sim.docker.machine.container.limit</code> on the Controller (default limit = 15 containers), or • The Docker Metric Collector Pool Size on the agent (default pool size = 3, or 90 containers). <p>You can specify this in the Administration Console as a Controller setting (all accounts) or as an Account setting for individual accounts. 150 is the maximum limit you can specify.</p>	15
<code>sim.machines.reuse.enabled</code>	<p>Reuse SIM Machine entities to handle an ephemeral environment. Support is currently limited to Docker container machines.</p> <p>If set to <code>false</code>, each new container is considered a new machine.</p>	true

sim.machines.tags.enabled	Enable or disable the import of Docker tags to the Controller.	true
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