

# Gaining Visibility into Server Events

This topic explains how to use the Parasoft Event Details perspective to gain insight into events that occur on the Virtualize Server (request messages received, response messages sent, errors, and so forth) and the message proxies that are deployed on them. This functionality is available for both local and remote Virtualize Servers.

You can determine which Virtualize Server's events are monitored, then start/stop reporting of these details on demand.

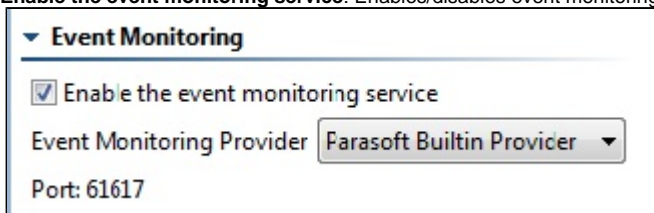
Sections include:

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## Enabling the Event Monitoring

By default, Parasoft Virtualize is configured to log and report the events related to a Virtualize Server. To view and modify event monitoring settings:

1. Start Virtualize Server in GUI mode.
2. In that GUI, open the configuration panel for the server you want visibility into (double-click its Virtualize Server view node).
3. In the **Server Configuration** tab, review and modify the available options:
  - **Enable the event monitoring service:** Enables/disables event monitoring for this server. Event monitoring is enabled by default.



- **Event Monitoring Provider:** Specifies the provider that the event monitoring service uses. By default, a built-in provider based on ActiveMQ is used. To use another provider, select it from the list of available options, then complete the applicable fields.
- **Port:** The default service port number 9617, but a different port number will automatically be assigned based on availability if that port is in use. You can also configure the port manually by setting the following property in your JVM arguments on startup:

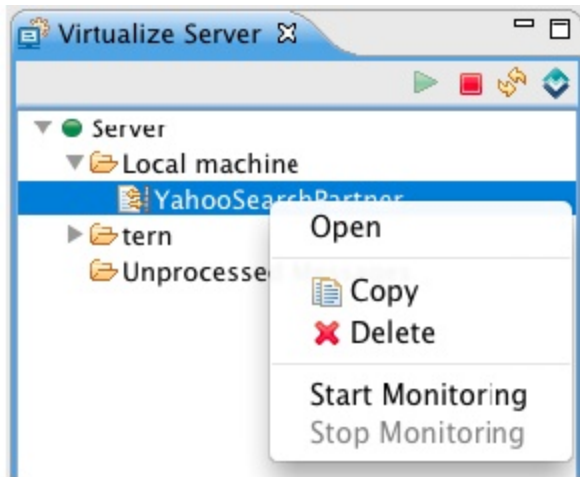
```
parasoft.event.monitoring.broker.port=<port>
```

## Starting/Stopping Event Monitoring

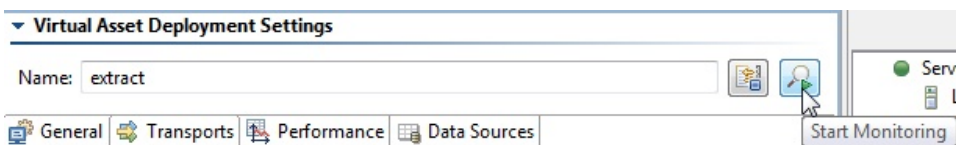
### Starting

To indicate that you want Virtualize to *start* reporting the events related to a virtual asset or message proxy, do one of the following:

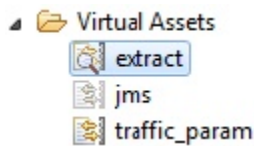
- Right-click the asset or proxy in the Virtualize Server view, then choose **Start Monitoring**.



- In the proxy's/asset's configuration panel, click **Start Monitoring**.



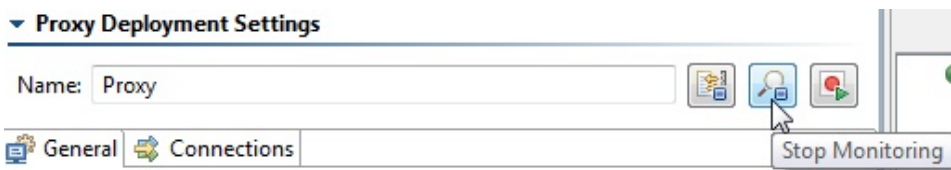
Note that the related icon will change to indicate that it is now being monitored.



## Stopping

To indicate that you want Virtualize to *stop* reporting the events related to a virtual asset or message proxy, do one of the following:

- Right-click the asset or proxy in the Virtualize Server view, then choose **Stop Monitoring**.
- In the proxy's/asset's configuration panel, click **Start Monitoring**.



### Tips

- You can start/stop monitoring events at the virtual asset level or message proxy level.
- You can select multiple virtual assets and start/stop monitoring for all of them with a single right-click command.

## Video Tutorial: Monitoring and Recording Traffic from a Message Proxy

In this video, we describe how to monitor and record traffic from a message proxy .

Viewing and Exploring Events

The Parasoft Event Details perspective is designed to help you view and explore events that occur on the Virtualize Server (request messages received, response messages sent, errors, and so forth).

You can open this perspective in any of the following ways:

- Click the **Parasoft Event Details** button in the shortcut bar (on the top right of the workbench).
- Click the **Open Perspective** button in the shortcut bar, choose **Other**, then choose **Parasoft Event Details** in the **Select Perspective** dialog that opens.
- Choose **Window > Open Perspective > Other**, then choose **Parasoft Event Details** in the **Select Perspective** dialog that opens.

The monitored events will be displayed in the Event Log view in the order in which they occur. Events reported include:

- Request messages received
- Response messages sent
- Data source usage (e.g., which data source row was

used in a response message)</li><li>Error events (a request did not correlate to a message, invalid messages were sent, etc.)</li><li>Provisioning action suite execution events (see <a href="/display/SOAVIRT9104/Defining+Provisioning+Actions">Defining Provisioning Actions</a> for details about action suites</li></ul></div><div class="confluence-embedded-file-wrapper"><img alt="Screenshot of Confluence page showing Event Log configuration options." data-bbox="75 60 933 927"/>The image is a screenshot of a Confluence page titled "Event Log" under the heading "Viewing the events generated when messages flow through a deployed message proxy". The page content is rendered as HTML, showing various configuration options for the Event Log. It includes sections for "Limit the number of events displayed and saved in the event log", "Focus on events whose details contain specified text", "Show only error events", "Show/hide events from specified servers", "Enable/disable Events from checked sources", and "Reporting Custom Events". The page also includes a "Reporting Custom Events" section with a code block showing how to use the report(Event) method. The HTML structure includes multiple instances of the confluence-embedded-file-wrapper tag, which are likely placeholders for images or screenshots that failed to load. The page is styled with a light blue header and a white background with blue links and text.

base-url="https://docs.parasoft.com" data-linked-resource-content-type="image/jpeg" data-linked-resource-container-id="29416752" data-linked-resource-container-version="3"></span></p><p><br/></p><p><span class="confluence-embedded-file-wrapper"><img alt="Screenshot of a table showing JMS messages." data-bbox="74 60 930 588"/>The JMS messages that are published by the Virtualize Server event monitoring service are in XML format. If you are interested in only certain event types, you can use a JMS selector expression to receive only events that meet your criteria:</p><div class="table-wrap"><table border="1" style="width: 42.6501%; border-collapse: collapse;"><thead><tr><th style="width: 28.9973%; text-align: left; padding: 5px;">Property Name</th><th style="width: 28.4553%; text-align: left; padding: 5px;">Values</th></tr></thead><tbody><tr><td style="padding: 5px;">Message Type</td><td style="padding: 5px;">Request</td></tr><tr><td style="padding: 5px;">Request received by a virtual asset</td><td style="padding: 5px;">true | false</td></tr><tr><td style="padding: 5px;">Request received by a proxy</td><td style="padding: 5px;">true | false</td></tr><tr><td style="padding: 5px;">Response sent by a virtual asset or a proxy</td><td style="padding: 5px;">true | false</td></tr><tr><td style="padding: 5px;">Response sent by a proxy</td><td style="padding: 5px;">true | false</td></tr><tr><td style="padding: 5px;">Failures</td><td style="padding: 5px;">true | false</td></tr><tr><td style="padding: 5px;">Failure event in a responder (e.g., validation failure) or a proxy connection error event</td><td style="padding: 5px;">true | false</td></tr><tr><td style="padding: 5px;">Error event (any errors that are not specific to a virtual asset or a proxy)</td><td style="padding: 5px;">true | false</td></tr></tbody></table></div><p>For example, if you want to subscribe to request and response messages for virtual assets, failures, and errors—but not to proxy message events—you would use the following expression:</p><ul style="list-style-type: none; padding-left: 0;"><li>request=true or response=true or failures=true or error=true</li></ul><p>The JMS selector expression can be passed to the JMS Session object when creating a consumer:</p><pre>javax.jms.Session.createConsumer(destinationName, selectorExpression, true)</pre><h3>Parasoft Event Details Perspective - GUI Reference</h3><p>The Parasoft Event Details UI opens the following views by default:</p><ul style="list-style-type: none; padding-left: 0;"><li><a href="#GainingVisibilityintoServerEvents-EventLogView">Event Log View</a></li><li><a href="#GainingVisibilityintoServerEvents-DetailsView">Details View</a></li><li><a href="#GainingVisibilityintoServerEvents-FiltersView">Filters View</a></li></ul><h3>Event Log View</h3><p>This area displays virtualization-related events such as messages sent, messages received, and errors. Selecting an item here displays more information in the Details view. The 5 most recent logs are saved and available.</p><p>For instance, the following log shows Virtualize Server events:</p><img alt="Screenshot of a log entry showing Virtualize Server events." data-bbox="74 350 930 410"/>The following log shows both Virtualize Server events and SOAtest test events (for tests executed by SOAtest with event logging enabled):</p><img alt="Screenshot of a log entry showing both Virtualize Server and SOAtest test events." data-bbox="74 420 930 480"/>This view provides more information about an event selected in the Event Log view.</p><img alt="Screenshot of the Filters View." data-bbox="74 490 930 550"/>This view allows you to filter events as described in <a href="#GainingVisibilityintoServerEvents-FilteringEvents1">Filtering Events</a></div></div></body></html>