Developer's Guide

Performance Counters (KPIs)

12/13/2025

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This article describes the basics of how Co-browse works together with the third-party Metrics Java library to provide reporting metrics about your server's Co-browse sessions. It also gives a walk-through of how to set up a sample JMX interface in order to view the metrics the Co-browse Server creates.

Contents

Co-browse and Metrics Library

Genesys Co-browse integrates with the third-party Metrics Java library, a toolkit that support all kinds of metrics out of the box: for example, counter, timer, histogram, and gauge.

This Metric library gives you several ways to report on current values: JMX (the main method), REST (for performance testing), and Logging.

About Co-browse Metrics

Starting with release 8.5.100.05, the Co-browse Server integrates with the Metrics Library client for the Java Management Extensions (JMX) reporter interface. JMX lets you observe Co-browse metrics using JMX tools.

Co-browse Server 8.5.002 extended metrics functionality to support logging to a file and the console.

Overview of Available Co-browse Metrics

Co-browse Server generates these kinds of metrics:

- Current count of sessions in different states (counter metric)
- Count of completed sessions since the start of the server (counter metric)
- Session timings (timer/histogram)
  - Agent overall rendering time (histogram)
  - Agent stages rendering time (histogram)
  - Co-browse session initialization on server side (timer)
  - Time of Customer, Agent and Controller joining to the Co-browse session (timer)
- Sessions interrupted without accept (counter metric).

Breakdown of Available Co-browse Metrics

Metric name	Description	Added in version:
ActiveSessions	Sessions set to "Activated" status when session is created by Customer and joined by Agent	8.5.001
CanceledInactiveSessions	Sessions canceled by initiator	8.5.001
InactiveSessions	Sessions set to "Inactive" status when session is created by Customer but waiting for Agent to join	8.5.001

Metric name	Description	Added in version:
LiveSessions	All sessions in statuses "Inactive" or "Activated".	8.5.001
NormallyEndedActiveSessions	Sessions ended during period of two sides Co-browse activity	8.5.001
TerminatedByUserDisconnectionSessions	Sessions ended through User timeout disconnect	8.5.001
TimeoutedInactiveSessions	Sessions ended by timeout in awaiting for Agent connection	8.5.001
TotalFinishedSessions	Total count of all finished sessions	8.5.001
CreateSessionAverage	Histogram showing the timings for session creation on the server side	8.5.001
JoinSessionAverage	Histogram showing the timings for the server join procedure for each member in a Co-browse activity	8.5.001
SlaveInitAverage	Histogram showing the timings for Agent initialization after a page reload with session ID	8.5.001
SlaveGetSessionAverage	Histogram showing the timings for the Agent to obtain the session environment after a page reload with session ID	8.5.001
SlaveHandshakeAverage	Histogram showing the timings for the Agent handshake via CometD after a page reload with session ID	8.5.001
SlaveJoinAverage	Histogram showing the timings for the Agent to join a session after a page reload with session ID	8.5.001
SlavePageDataAverage	Histogram of timing for Agent got page data since page reload with session ID	8.5.001
SlaveRenderAverage	Histogram showing the timings for the Agent to fully render after a page reload with session ID	8.5.001
ServerResponseTime	Histogram showing the average timings for the latest N routings of data from customer browser to agent browser, where N is defined by the `ServerResponseTime.slidingWindowSize` option value.	8.5.002

How To Expose Co-browse metrics through the JMX interface

There are many JMX tools that you can use to observe the metrics Co-browse Server creates:

- JConsole tool bundled with Oracle Java (TM)
- EJTools JMX Browser
- Panoptes
- jManage
- MC4J
- Zabbix

Using JConsole to Observe Co-browse Metrics

To use JConsole to view Co-browse metrics:

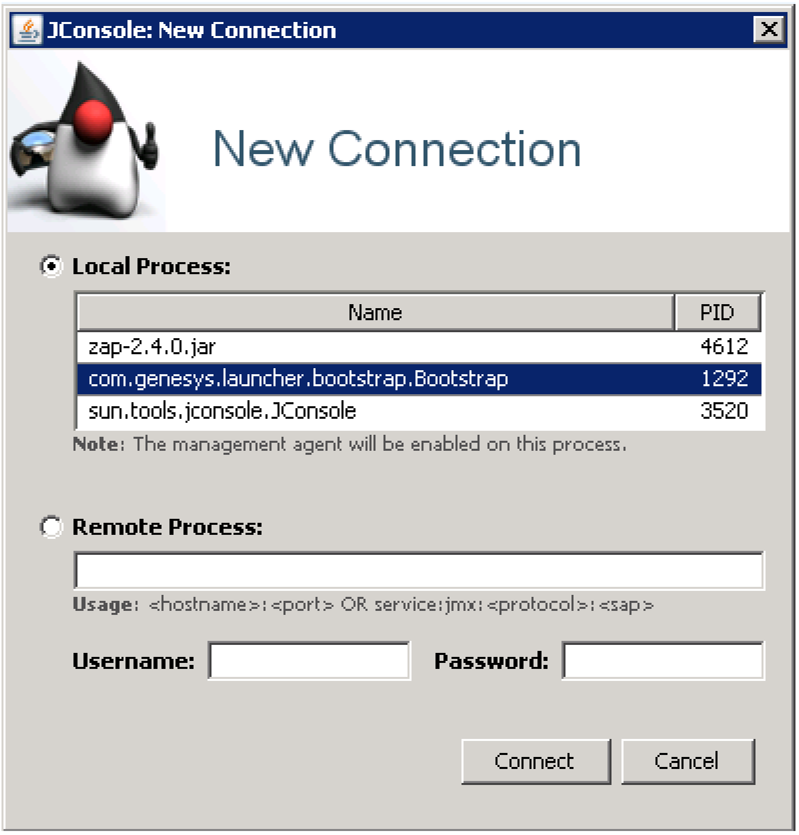
1. Connect JConsole to Co-browse Server
2. Open the JMX panel to view the metrics

Connect JConsole to Co-browse Server

Connecting JConsole to Co-browse Server depends on the Co-browse Server process:

- Connect to Co-browse started as a *local java process*
- Connect to Co-browse started as a *server*
- Connect to Co-browse started as a *Windows service*

Connect to Co-browse started as a *local java process*



● Local Process:

Name	PID
zap-2.4.0.jar	4612
com.genesys.launcher.bootstrap.Bootstrap	1292
sun.tools.jconsole.JConsole	3520

Note: The management agent will be enabled on this process.

○ Remote Process:

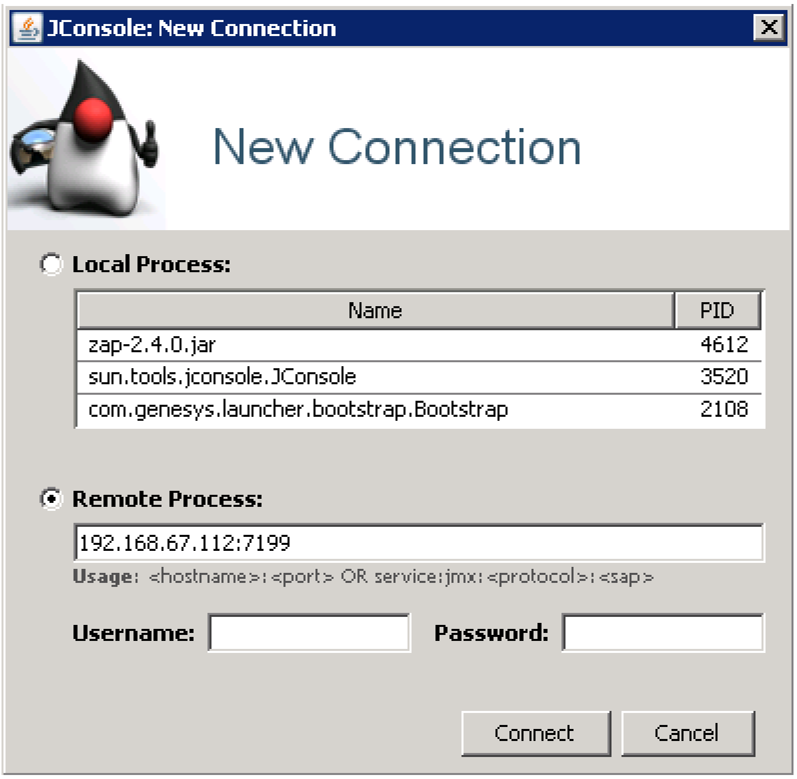
Usage: <hostname>:<port> OR service:jmx:<protocol>:<sap>

1. Run **jconsole.exe** from the **<jdk>/bin** directory.
2. In the **New Connection** dialog, specify the Co-browse launcher java process.

   If the Co-browse Server was started using a .bat file in the same host where JMX console is opened, specify the following process from the **Local Process** list:

   ```
   com.genesys.launcher.bootstrap.Bootstrap
   ```

Connect to Co-browse started as a *server*



Name	PID
zap-2.4.0.jar	4612
sun.tools.jconsole.JConsole	3520
com.genesys.launcher.bootstrap.Bootstrap	2108

Remote Process: 192.168.67.112:7199

Usage: <hostname>:<port> OR service:jmx:<protocol>:<sap>

If the Co-browse Server was started remotely as a server, follow these steps:

1. Run **jconsole.exe** from the **<jdk>/bin** directory.
2. Open `setenv.bat` and uncomment all lines under

   ```
   :: Uncomment for enabling JMX Remote. Memorize JMX port.
   ```

   Save your changes.
3. Restart the Co-browse Server application.
4. Specify `host:<JMX port>` in the **Remote Process** section:

Connect to Co-browse started as a *Windows service*

If you started Co-browse Server as a Windows service, first stop the service, reinstall it, and start it again, as follows:

1. Stop the service.
2. Open **setenv.bat** and find the service name in the line set SVC_NAME=
3. Run this command:

   ```
   cobrowse.bat -service SERVICENAME remove
   ```

to remove the service.

4. Open **setenv.bat** and uncomment all lines under

   ```
   :: Uncomment for enabling JMX Remote. Memorize JMX port.
   ```

   Save your changes.
5. Run this command:

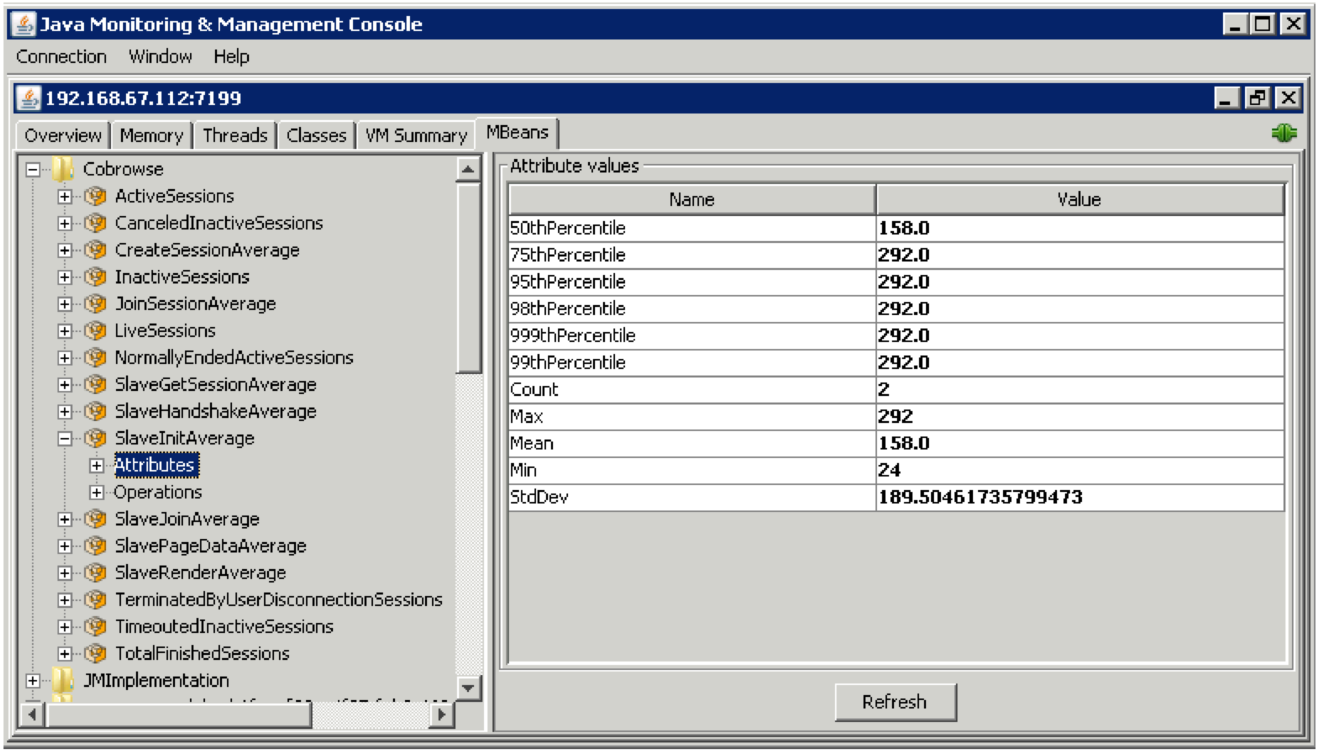
   ```
   cobrowse.bat -service SERVICENAME install
   ```

   to install the service.
6. Start the service.
7. Specify `host:<JMX port>` from the **Remote Process** section, see above.

Once you connect to JConsole to Co-browse Server, you can open the JMX panel to view the metrics.

Open the JMX panel to view the metrics

1. Click `Connect` in the **New Connection** dialog. The JMX panel opens.
2. Open the **MBeans** tab and expand the **Cobrowse** branch. All Co-browse metrics are there.
3. To refresh the metrics, click **Refresh**.



Name	Value
50thPercentile	158.0
75thPercentile	292.0
95thPercentile	292.0
98thPercentile	292.0
999thPercentile	292.0
99thPercentile	292.0
Count	2
Max	292
Mean	158.0
Min	24
StdDev	189.50461735799473

Configuring logging reporter for metrics

Co-browse Server release **8.5.002** extends metric functionality to support logging to a file and to the console.

To configure the logging reporter to log to a file or to the console:

Logging to a file

To enable logging to a *file*:

metrics section

In the **metrics** section of your Co-browse Cluster application configure the following:

- Set **reporter.log.enabled** to `true` (`false` by default)
- Configure **reporter.log.logFrequency** (default value is `30min`)

log section

In the Co-browse Node application **log** section configure the following:

- Set **verbose** to `trace`
- Set `<output>=<log file name>` where output is all, trace, or debug.

Logging to the console

To enable logging to the *console*:

metrics section

In the **metrics** section of you Co-browse Cluster application configure the following:

- Set **reporter.console.enabled** to `true` (`false` by default)
- Configure **reporter.console.logFrequency** (default value is `30min`)

log section

In the Co-browse Node application **log** section configure the following:

- Set **verbose** to `trace`
- Set `<output>=<stdout>` where output is all, trace, or debug.