

# **webMethods EntireX**

## **Monitoring EntireX**

Version 10.9

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This document applies to webMethods EntireX Version 10.9 and all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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# 1

## About this Documentation

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## Document Conventions

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Convention	Description
<b>Bold</b>	Identifies elements on a screen.
Monospace font	Identifies service names and locations in the format <i>folder.subfolder.service</i> , APIs, Java classes, methods, properties.
<i>Italic</i>	Identifies:  Variables for which you must supply values specific to your own situation or environment. New terms the first time they occur in the text. References to other documentation sources.
Monospace font	Identifies:  Text you must type in. Messages displayed by the system. Program code.
{ }	Indicates a set of choices from which you must choose one. Type only the information inside the curly braces. Do not type the { } symbols.
	Separates two mutually exclusive choices in a syntax line. Type one of these choices. Do not type the   symbol.
[ ]	Indicates one or more options. Type only the information inside the square brackets. Do not type the [ ] symbols.
...	Indicates that you can type multiple options of the same type. Type only the information. Do not type the ellipsis (...).

## Online Information and Support

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### Product Documentation

You can find the product documentation on our documentation website at <https://documentation.softwareag.com>.

In addition, you can also access the cloud product documentation via <https://www.software-ag.cloud>. Navigate to the desired product and then, depending on your solution, go to “Developer Center”, “User Center” or “Documentation”.

### Product Training

You can find helpful product training material on our Learning Portal at <https://knowledge.softwareag.com>.

## Tech Community

You can collaborate with Software AG experts on our Tech Community website at <https://tech-community.softwareag.com>. From here you can, for example:

- Browse through our vast knowledge base.
- Ask questions and find answers in our discussion forums.
- Get the latest Software AG news and announcements.
- Explore our communities.
- Go to our public GitHub and Docker repositories at <https://github.com/softwareag> and <https://hub.docker.com/publishers/softwareag> and discover additional Software AG resources.

## Product Support

Support for Software AG products is provided to licensed customers via our Empower Portal at <https://empower.softwareag.com>. Many services on this portal require that you have an account. If you do not yet have one, you can request it at <https://empower.softwareag.com/register>. Once you have an account, you can, for example:

- Download products, updates and fixes.
- Search the Knowledge Center for technical information and tips.
- Subscribe to early warnings and critical alerts.
- Open and update support incidents.
- Add product feature requests.

## Data Protection

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Software AG products provide functionality with respect to processing of personal data according to the EU General Data Protection Regulation (GDPR). Where applicable, appropriate steps are documented in the respective administration documentation.





## 2 Introduction to Monitoring Approaches

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## Application Monitoring

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Application Monitoring is an EntireX feature that enables you to monitor the response times in your distributed applications, and it also enables you to monitor certain error situations. The heart of Application Monitoring is the EntireX Application Monitoring Data Collector, which collects the response time data of each involved software component of selected synchronous EntireX RPC services. The Application Monitoring Data Collector stores the KPI values in CSV (comma-separated values) files. The files can be processed by any third-party tool that supports CSV files, for example Microsoft Excel. Alternatively, you can hook in your own monitoring back end, using the callback user exit of the Data Collector.

### ■ Third-party Tool

Use this method if you want to have a quick look at the results, using any tool that supports CSV files (for example Microsoft Excel).

### ■ Callback User Exit

Use the callback user exit of the Data Collector to hook in your own monitoring back end. Write a Java class that implements the `DataCollectorCallback` interface and make it known to the Data Collector. Use this method if you want to feed arbitrary monitoring back ends in real time. See *Callback User Exit* under *Setting up the External Application Monitoring Data Collector* in the Application Monitoring documentation.

See the separate the separate Application Monitoring documentation documentation for more details.

## Monitoring from the Command-line

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There are three different ways of monitoring EntireX from the command line:

- [Command Central](#)
- [ETBINFO](#)
- [Monitoring Scripts](#)

### Command Central

Software AG Command Central is a tool you can use to perform administrative tasks remotely from a single location. It can assist with configuration, management and monitoring tasks. As an operator you can monitor server status and health, as well as start and stop servers from a single location. You can also configure alerts to be sent in case of unplanned outages. For each registered instance you can see up to three KPIs in Command Central's instance overview. The core Command Central documentation is provided separately and is also available under **Guides for Tools Shared by Software AG Products** on the Software AG documentation website. You can monitor the following EntireX components using the Command Central command line.

- **EntireX Broker (Linux and Windows)**

*Administering EntireX Broker using the Command Central Command Line*

- **EntireX Broker (Mainframe)**

*EntireX Mainframe Broker Monitoring using the Command Central Command Line*

- **RPC Servers**

*Administering the EntireX RPC Server for C | CICS Socket Listener | CICS IPIC | .NET | IMS Connect | Java | IBM MQ | XML/SOAP using the Command Central Command Line*

### ETBINFO

The command-line utility `ETBINFO` queries the Broker for different types of information, generating an output text string with basic formatting. This text output can be further processed by script languages. `ETBINFO` uses data descriptions called profiles to control the type of data that is returned for a request. `ETBINFO` is useful for monitoring and administering EntireX Broker efficiently - for example, how many users are to run concurrently and whether the number of specified message containers is large enough.

For more information see `ETBINFO` under *Broker Command-line Utilities* in the platform-specific Administration documentation.

## Monitoring Scripts

EntireX provides a set of command-line scripts under Windows as a solution to the following scenarios:

- “I want a quick overview of my standard broker and a list of active external services that are running.”
- “I want to monitor an EntireX component (broker, service, client) over time.”
- “I want to monitor my environment and check that all components (broker, RPC servers) are up and running.”

You can select the scripts from the EntireX Monitoring Scripts Menu or call the individual scripts from the command-line.



**Note:** You can use these scripts with local or remote brokers. The scripts were introduced with version 9.7, but can be used with brokers of any supported version.

For more information see the separate documentation section *EntireX Monitoring Scripts*.

## Monitoring with Command Central

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Software AG Command Central is a tool you can use to perform administrative tasks remotely from a single location. It can assist with configuration, management and monitoring tasks. As an operator you can monitor server status and health, as well as start and stop servers from a single location. You can also configure alerts to be sent in case of unplanned outages.

For each registered instance, you can see up to three KPIs in Command Central's instance overview. Command Central is the tool of choice if you need to get a quick overview of your instance landscape.

The core Command Central documentation is provided separately and is also available under **Guides for Tools Shared by Software AG Products** on the Software AG documentation website. See the following sections for EntireX-specific information:

- **EntireX Broker (Linux and Windows)**
  - *Introduction to Administering EntireX Broker with Command Central (Linux and Windows)*
  - *Administering EntireX Broker using the Command Central GUI*
  - *Administering EntireX Broker using the Command Central Command Line*

## ■ EntireX Broker (Mainframe)

- *Introduction to EntireX Mainframe Broker Monitoring*
- *EntireX Mainframe Broker Monitoring using the Command Central GUI*
- *EntireX Mainframe Broker Monitoring using the Command Central Command Line*

## ■ RPC Servers

- *Introduction to Administering EntireX RPC Servers using Command Central (Linux and Windows)*
- *Administering the EntireX RPC Server for C | CICS Socket Listener | CICS IPIC | .NET | IMS Connect | Java | IBM MQ | XML/SOAP using the Command Central GUI*
- *Administering the EntireX RPC Server for C | CICS Socket Listener | CICS IPIC | .NET | IMS Connect | Java | IBM MQ | XML/SOAP using the Command Central Command Line*

## webMethods EntireX Adapter for Integration Server

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For monitoring the webMethods EntireX Adapter for Integration Server (IS), your best choice is the IS Administration Console, which provides basic information as well as statistical values of connections, services and listeners. You can also reset the statistical values from the IS Administration Console. See also *Settings and Information* in the EntireX Adapter documentation.

## Watching the Default Broker View in Designer/Eclipse

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The EntireX Default Broker View is part of the Designer. It displays the status of the EntireX Default Broker and the active RPC Services registered to it. Use it if you need to know whether your local default broker is running, or whether relevant RPC servers are connected to it. You can perform basic administration tasks on the local default broker and also shut down connected server instances or services.



# 3

## EntireX Mainframe Broker Monitoring

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This chapter introduces EntireX Mainframe Broker Monitoring, using Command Central. It covers the following topics:

See also *EntireX Mainframe Broker Monitoring* using the Command Central GUI | Command Line in the platform-independent Administration documentation.



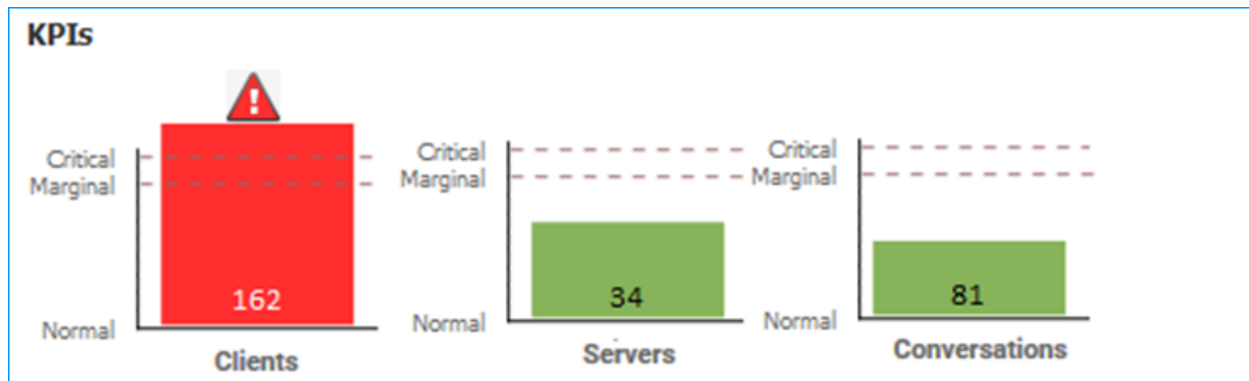
**Note:** Command Central functionality that is not EntireX-specific is described in the separate Command Central documentation or the online help provided with Command Central.

## Introduction

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EntireX Mainframe Broker Monitoring is a package with which you can monitor EntireX Broker on mainframe platforms z/OS and BS2000. Define an instance of your mainframe broker, using Command Central under Linux or Windows. This instance - a so-called proxy - holds connection information to the remote broker. With the Mainframe Broker Monitoring package you can:

- directly recognize whether the Broker is online
- switch to the Administration page to list the registered services and server
- check directly whether more server instances are needed.
- see whether the KPIs are in a range expected by your organization



The following KPIs help you administer, troubleshoot and resolve performance issues in EntireX Broker:



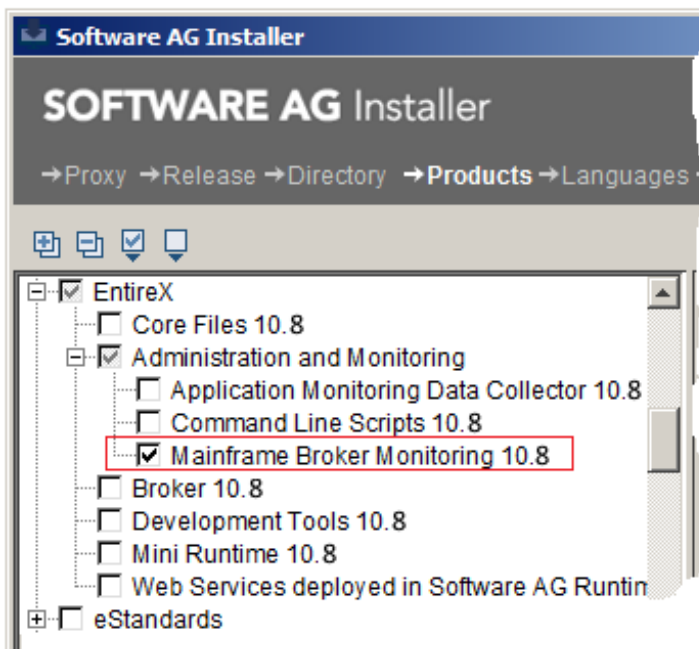
KPI	Description
Clients	Number of active clients.
Servers	Number of active servers.
Conversations	Number of active conversations.

## Installing your EntireX Mainframe Broker Monitoring Package

- [Using the Software AG Installer](#)
- [Using Command Central](#)

### Using the Software AG Installer

In the Software AG Installer, choose **EntireX > Administration and Monitoring** and check **Mainframe Broker Monitoring 10.9**.



For more information see

- *EntireX Administration and Monitoring* under *EntireX Installation Packages* in the General Installation documentation
- *Software AG Installer* under *Software AG Suite & Cross-Product Guides*.

## Using Command Central

See *Getting Started with Command Central* in the separate Command Central documentation under Software AG Suite & Cross-Product Guides.

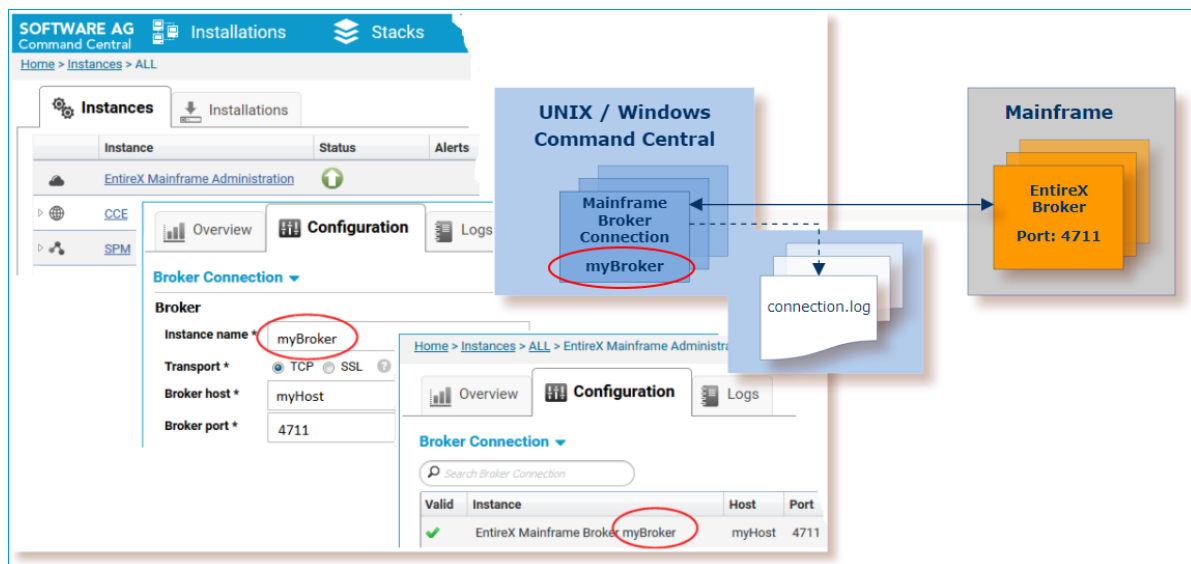
## Create an Instance for EntireX Mainframe Broker Monitoring

To monitor a mainframe broker, you need to define a proxy instance in Command Central.

### ➤ To create an instance for EntireX Mainframe Broker Monitoring

- 1 Log on to Command Central and navigate to **Home > Instances > ALL > EntireX Mainframe Administration**.
- 2 Click the **Configuration** tab.
- 3 Add connection information.

The new proxy instance of your mainframe broker now appears in the list of instances.



All options are described in more detail under *Creating an EntireX Mainframe Broker Connection* in the platform-independent Administration documentation.



**Note:** You can also create a connection to a mainframe broker using the Command Central command line.

## Monitoring your EntireX Mainframe Broker

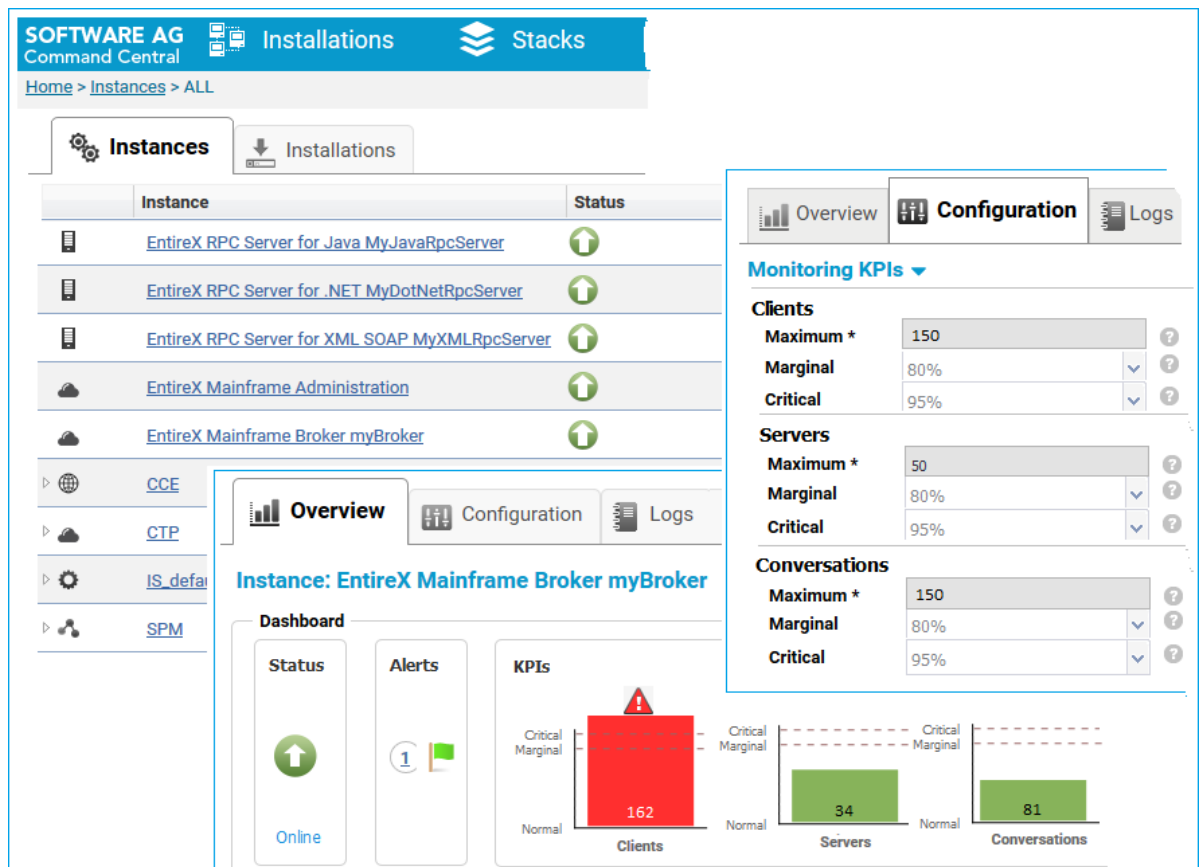
### > To monitor your mainframe broker

- 1 In Command Central, navigate to **Home > Instances > ALL**.

The instance **myBroker** you created in the previous step is displayed as **EntireX Mainframe Broker myBroker**.

- 2 Click on this instance, select the **Overview Tab** to watch the following:

- the status of the instance (online or stopped)
- alerts
- the following KPIs:
  - active clients
  - registered servers
  - ongoing conversations between them.



- 3 On the **Configuration** tab, choose **Monitoring KPIs** to adjust scaling and boundary values (maximal/marginal/critical) for the KPIs, clients, servers and conversations.
- 4 If a defined boundary value is crossed, the color changes to direct your attention to the KPI:
  - orange: a marginal line is crossed
  - red: a critical boundary value is exceeded.
- 5 If required, from the **Configuration** tab, choose **Broker Connection** to modify the connection parameters to your EntireX mainframe broker.



**Notes:**

1. All options are described in more detail under *Configuring an EntireX Mainframe Broker Connection* in the platform-independent Administration documentation.
2. When you create a mainframe connection, this is logged to file *connection.log* of the mainframe connection instance. Do not confuse this logfile with the broker log on the mainframe (see *Tracing EntireX Broker* under *Tracing EntireX Broker* for more information).



**Note:** You can also configure your connection to a mainframe broker using the Command Central command line.

## Viewing your Registered Services and Servers

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➤ **To view your registered services and servers**

- 1 Navigate to your instance **EntireX Mainframe Broker myBroker**.
- 2 Use the **Administration** tab for an overview of services currently running.

**SOFTWARE AG**  
Command Central

Installations Stacks

Home > Instances > ALL

**Instances** Installations

Instance	Status
<a href="#">EntireX RPC Server for XML SOAP MyXMLRpcServer</a>	Up
<a href="#">EntireX Mainframe Administration</a>	Up
<a href="#">EntireX Mainframe Broker myBroker</a>	Up

CCE CTP IS\_defar SPM

Overview Configuration Logs Administration

**Services**

**Currently Running Services**

Search for values using a text string

Class/Server/Service	Server Instances	Requests	Wait for Servers	Conversations
<a href="#">RPC/SRV4/CALLNAT</a>	1	0	0 (0%)	0
<a href="#">RPC/SRV4/EXTRACTOR</a>	1	0	0 (0%)	0
<a href="#">RPC/SRV3/CALLNAT</a>				
<a href="#">RPC/SRV3/EXTRACTOR</a>				
<a href="#">RPC/SRV3/DEPLOYMENT</a>				

**Service Details**

**Service**

RPC/SRV4/CALLNAT

**Server Instances**

Search for values using a text string

Name	Type	Host	Version	User ID	Start Time
EntireX_RPC_Server	Server	daef	10.5.0.0	ERX-SERV	2018.11.27 08:30:52

Watch the number of active **Server Instances** (replicates), **Requests**, **Wait for Servers** and **Conversations** for a service.

Of particular interest is the column **Wait for Servers**. This tells you the number and percentage of requests where clients had to wait because all running server instances were busy. Consider starting more server instances if those values are high.

See also *Displaying Services and Servers* in the platform-independent Administration documentation.



**Note:** You can list server instances and running services using the Command Central command line.

## Supported Configuration Types

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Command Central supports the following configuration instance:

Instance	Type	Use to...
MONITORING-KPIS	MONITORING-KPIS	Show and edit the Monitoring KPI settings such as marginal and critical bounds, etc.