

webMethods EntireX

About this Documentation

Version 9.10

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This document applies to webMethods EntireX Version 9.10 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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Document Conventions

Convention	Description
Bold	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

Software AG Documentation Website

You can find documentation on the Software AG Documentation website at <http://documentation.softwareag.com>. The site requires credentials for Software AG's Product Support site Empower. If you do not have Empower credentials, you must use the TECHcommunity website.

Software AG Empower Product Support Website

If you do not yet have an account for Empower, send an email to empower@softwareag.com with your name, company, and company email address and request an account.

Once you have an account, you can open Support Incidents online via the eService section of Empower at <https://empower.softwareag.com/>.

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Software AG TECHcommunity

You can find documentation and other technical information on the Software AG TECHcommunity website at <http://techcommunity.softwareag.com>. You can:

- Access product documentation, if you have TECHcommunity credentials. If you do not, you will need to register and specify "Documentation" as an area of interest.
- Access articles, code samples, demos, and tutorials.
- Use the online discussion forums, moderated by Software AG professionals, to ask questions, discuss best practices, and learn how other customers are using Software AG technology.
- Link to external websites that discuss open standards and web technology.

Data Protection

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 Post-installation Steps under Windows

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Under UNIX and Windows, EntireX is now installed using the Software AG Installer, which you download from the Software AG Empower website at [Empower](http://empower.softwareag.com). You can view the documentation for the Software AG Installer under <http://documentation.softwareag.com> > *Software AG Installer and Update Manager*.

This chapter assumes you have already installed EntireX using the Software AG Installer. It covers installation instructions for components not included in the Software AG Installer; instruction on how to verify the installation and set up EntireX Security.

Broker Instance Created Automatically during Installation

If check box **Turn on Autostart for default EntireX Broker** is checked, the installation starts the default broker ETB001. This broker instance listens on the TCP/IP and SSL ports defined in the custom panel during installation. Default port numbers are 1971 (TCP/IP) and 1958 (SSL).

» To change the default port of the default broker

- 1 Stop the broker, using one of the following methods:
 - Use System Management Hub. See *Stopping a Local Broker*.
 - Use the Windows start menu entry **Software AG > Stop Servers > Stop EntireX Default Broker**.
- 2 Edit the configuration file *config/entirex.config* and change the TCP/IP and SSL port numbers to a different value. For other broker instances, see **PORT** under *Broker Attributes*.
- 3 Start the broker, using one of the following methods:
 - Use System Management Hub. See *Starting a Local Broker*.
 - Use the Windows start menu entry **Software AG > Start Servers > Start EntireX Default Broker**.

Broker Service 'etbsrv'

The broker service *etbsrv.exe* must be active on every machine where a broker instance is running. The installation procedure installs it with startup type “automatic” and with status type “started”. *etbsrv.exe* is in the *bin* subdirectory of the EntireX installation directory.

Starting or Restarting the Administration Service

The Administration Service is started or stopped by the broker service `etbsrv`.

When the broker has been started successfully, the Administration Service waits for messages from other started brokers. This wait period lasts around 90 seconds.

After this wait period, all brokers are started that have an Autostart value of "yes" that have not already started.

When the Administration Service is restarted, it takes a maximum of 90 seconds until the current system status is displayed correctly.

Eclipse Considerations

Eclipse is an optional component of EntireX. For *EntireX Workbench*, it is required.

If you have not already installed Eclipse at your site, you can install Eclipse and the *EntireX Workbench* from the installation medium. If you wish to install the *EntireX Workbench* into an existing Eclipse environment, use the Eclipse update mechanism to deploy the EntireX feature.

Migrating from one EntireX Version to a Higher Version

When you migrate from one EntireX version to a higher version you have to change the license file setting to the new license file.

➤ To set a new license file

- Go to the Preferences pages in Eclipse (**Window > Preferences**) and select the page **Software AG > EntireX > Installation**.

Installing the EntireX Workbench Plug-ins in Standalone Mode

If you want to install the Workbench plug-ins in standalone mode, that is, not as part of the full webMethods EntireX installation, see *Installing the EntireX Workbench Plug-ins in Standalone Mode*.

Verifying the EntireX Windows Installation

To verify successful installation, you can use the `etbinfo` utility. It queries the Broker for information as described below.

1. If you have not already created a default Broker, create one using System Management Hub. See *Creating a Local Broker*.
2. Start the Broker using SMH.
3. Run `etbinfo` to get back a response from the broker. Start a Command Prompt session, change your directory to the EntireX *bin* directory, for example `C:\SoftwareAG\EntireX\bin`, and use the following command:

```
etbinfo -blocalhost -dBROKER -pbroker.pro
```

This assumes that you use the default port 1971. Otherwise use the command:

```
etbinfo -blocalhost:port -dBROKER -pbroker.pro
```

where `port` is the port number of your broker.

This should display a simple formatted report with information about the broker.

Setting up EntireX Security under Windows

- [Setting up EntireX Security for Broker Kernel](#)
- [Setting up EntireX Security for Broker Stubs](#)



Note: You must set up EntireX Security for broker kernel and - if your application(s) use API version 7 or below - also for broker stubs.

Setting up EntireX Security for Broker Kernel

» To set up EntireX Security for broker kernel under Windows

- 1 Determine that all prerequisites for EntireX components have been met before setting up EntireX Security. See *Windows Prerequisites*.
- 2 Insert the following statement into the broker-specific section of the attribute file. See *Broker-specific Attributes* under *Broker Attributes*.

■ SECURITY=YES

- 3 Modify the security-specific section of the broker attribute file according to your requirements. See *Security-specific Attributes* under *Broker Attributes*. These parameters are used to determine whether you will use Windows local security or LDAP-based authentication. If you are using LDAP-based authentication, authorization rules are not available to you.



Note: Authentication: Windows authentication calls `LogonUser()` with the flag `LOGON32_LOGON_INTERACTIVE`.

Setting up EntireX Security for Broker Stubs



Note: If you are running your application(s) at ACI version 7 or below, the following steps are required to install EntireX Security for the Broker stubs in all environments where applications execute either as clients or servers. See *List of Components per Platform* for where EntireX Security for broker stubs is supported. These steps are not required if you are running your application(s) at ACI version 8 or above.

➤ **To install EntireX Security for broker stubs on Windows**

- When requested to specify the installation type, choose **Custom** and check the **Security** box.

(The required directories including *secuexit.dll* are copied to your computer during installation.)



Notes:

1. *Secuexit.dll* is needed for backward compatibility if your applications issue any commands using ACI version 7 or below. Applications using ACI version 8 do not require this additional component in the stub.
2. For encrypted transport we strongly recommend using the Secure Sockets Layer/Transport Layer Security protocol. See *SSL/TLS and Certificates with EntireX*.



Caution: If stub tracing level is > 1, unencrypted contents of the send/receive buffers are exposed in the trace.

Installation of EntireX Security for Broker stubs is now complete. Now you can install the security components for the Broker stubs on the remaining operating systems where your application components are located.

Mini Runtime Considerations

The EntireX Mini Runtime is a set of components that can be used for the deployment of applications using the Broker ACI, the Broker RPC, and - under Windows only - DCOM Wrapper objects and the Broker ActiveX Control. Unlike the full EntireX Runtime, the Mini Runtime does not include Java capabilities. The Mini Runtime is provided as a separate package in the Software AG Installer.

If you need the EntireX Mini Runtime with your application, you may have to extend the `PATH` variable to `<inst_root>\EntireX\bin` before starting your application (for 32-bit applications: `<inst_root>\EntireX\bin\x86`).

Natural Considerations

Installing the Natural-based EntireX Broker Tutorial under Windows

➤ To install the Tutorial

- 1 Load all objects of *SYSETB.TRA* in the *ETC* subdirectory, using the Natural utility *SYSOBJH*. See *Object Handler* in the Natural Tools and Utilities documentation for more information.
- 2 Logon to Natural library *SYSETB* and issue the *CATALL* command to catalog all the programs in the library.

Broker ActiveX Control and TOR Editor

Before you can use the Broker ActiveX Control (file *ebx.dll*) and/or the TOR Editor (file *toredit.exe*) you have to register the Broker ActiveX Control as a COM component. Start the program *regsvr32* with "Run as Administrator":

```
regsvr32 <path>\ebx.dll
```

Files *ebx.dll* and *toredit.exe* are located in the *<inst_root>\EntireX\bin\x86* directory of the installation.



Note: Only program *ebx.dll* needs to be registered as a COM component. See *Calling the Transaction Object Editor*.

