

## **webMethods EntireX**

### **Post-installation Steps under Windows**

Version 9.6

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This document applies to webMethods EntireX Version 9.6.

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 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 <http://empower.softwareag.com/>. You can view the documentation for the Software AG Installer under *webMethods Product Documentation > webMethods Product Suite > Documentation by Product > System Requirements, Installation, and Upgrade* on the [Software AG Product Documentation](#) website.

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.

## Mini Runtime

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The EntireX Mini Runtime is a set of components that may 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 Security, the Mini Runtime does not include Java capabilities.

The Mini Runtime is delivered as install kit *entirexminiruntime\_x32.exe* (32-bit) or *entirexminiruntime\_x64.exe* (64-bit) located in the `<drive>:\SoftwareAG\EntireX\etc` directory. With a 64-bit EntireX installation, both versions of the runtime are provided. This install kit installs the Broker stubs, the C and .NET RPC runtime; on a 32-bit system it also installs the Broker ActiveX Control.

The default installation directory is "%ProgramFiles%\Common Files\Software AG", but this directory can be changed with an installation option (see below).

The Mini Runtime is no longer installed automatically as in earlier versions. However, as in previous versions, only one instance can be installed on a system. Overinstall of an existing Mini Runtime is only possible with a new version or SP; it is not possible to overinstall the Mini Runtime with an older version or SP. The new installation will always install into the directory where the old Mini Runtime is installed. Installing into a new directory is only possible if the old version has been explicitly deinstalled.

To be able to find the libraries in the Mini Runtime, applications must extend the `PATH` variable with the installation directory of the Mini Runtime. If a library in the Mini Runtime needs to load another library from the Mini Runtime, there are three different scenarios:

1. The Mini Runtime is installed into the application's *bin* directory. In this case nothing has to be done. Also the `PATH` variable does not have to be extended because all libraries will be found by the operating system automatically.
2. If the Mini Runtime is installed into an arbitrary directory, this directory must be added to the `PATH`. If the first library is found using the `PATH`, it will try to load other libraries from the Mini Runtime with the following search algorithm:
  - a. Check if the library can be loaded in the same directory

- b. As a fallback, look into %CommonProgramFiles%/Software AG
- c. If the Mini Runtime is installed into %CommonProgramFiles%/Software AG, a library would try to load it from this directory.

## Silent Installation

### Default

#### ▶ To start the default silent installation

- Enter the command:

```
entirexminiruntime.exe /V"/Leoi %temp%\entirexminiruntime.log /qr"
```

### With Different Installation Directory

#### ▶ To start the silent installation with a different directory

- Enter the command:

```
entirexminiruntime.exe /V"INSTALLDIR=C:\exxmini rt /Leoi ↵  
%temp%\entirexminiruntime.log /qr"
```

If the installation directory path contains blanks, specify the path name in quotes, e.g.:  
INSTALLDIR="\C:\exx mini rt\".

### With Security

#### ▶ To start the silent installation with security (secuexit.dll)

- Enter the command:

```
entirexminiruntime.exe /V"ADDLOCAL=CommonFiles,BrokerActivex,Security  
/Leoi %temp%\entirexminiruntime.log /qr"
```

## With Security and Encryption

### ▶ To start the silent installation with security and encryption

- Enter the command:

```
entirexminiruntime.exe /V"ADDLOCAL=CommonFiles,BrokerActivex,Security,Encryption  
/Leoi %temp%\entirexminiruntime.log /qr"
```



#### Notes:

1. Add the following to the environment path: `<drive>:\Program Files\Common Files\Software AG`.
2. To install in per-machine mode, an additional parameter is required: "ALLUSERS=2".

## Broker Instance Created Automatically during Installation

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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* under *Broker Administration using System Management Hub* in the Windows administration documentation.
  - 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* in the platform-independent administration documentation.
- 3 Start the broker, using one of the following methods:
  - Use System Management Hub. See *Starting a Local Broker* under *Broker Administration using System Management Hub* in the Windows administration documentation.
  - Use the Windows start menu entry **Software AG > Start Servers > Start EntireX Default Broker**.



## Broker Service 'etbsrv'

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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

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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

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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.

The EntireX Workbench needs a license file with a valid license. By default it checks for a license file in folder *<webMethods Installation Directory>\common\conf*. If the appropriate license is not found in this folder, set the license file name in the preference page **Software AG > EntireX > Installation**.

## 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 Preference 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* in the general installation documentation.

## Verifying the EntireX Windows Installation

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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* under *Broker Administration using System Management Hub* in the Windows administration documentation.
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.

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## Setting up EntireX Security under Windows

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- [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* in the EntireX Release Notes.
- 2 Insert the following statement into the broker-specific section of the attribute file. See *Broker-specific Attributes* under *Broker Attributes* in the platform-independent administration documentation.

■ SECURITY=YES

- 3 Modify the security-specific section of the broker attribute file according to your requirements. See *Security-specific Attributes (DEFAULTS=SECURITY)* under *Broker Attributes* in the platform-independent administration documentation. 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* under *Platform Coverage* in the EntireX Release Notes 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**

- 1 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 as part of installing the contents of the EntireX DVD.)



**Note:** *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 To use encrypted communication, set the environment variable `NA2_BKPRIV=1`. For no encryption, set `NA2_BKPRIV=0` (default).



**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.

## Installing the Natural-based EntireX Broker Tutorial under Windows

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▶ **To install the Tutorial**

- 1 Load all objects of *SYSETB.TRA* in the *ETC* subdirectory, using the Natural utility *YSOBJH*. 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.