

Configuring webMethods EntireX to Run with the Microsoft Windows Personal Firewall

If your machine is already running within a firewall-protected enterprise environment, please contact your system administrator to clarify whether this Windows firewall can be switched off to avoid having to configure it.

**Warning:**

Disabling the firewall is solely your responsibility as user. Under no circumstances shall Software AG be responsible for any loss or other damages or costs which might occur due to disabling the Windows firewall.

For detailed information on configuring the Windows firewall, see the Microsoft documentation provided with your Windows version. In addition to this information, Software AG provides examples of how to run EntireX in an environment protected by the Windows firewall. However, these examples only provide technical guidelines; Software AG cannot guarantee that the examples given will provide the security you require.

These examples are based on two methods: one to allow a specific executable to open ports, the other to allow a specific port to be used by a certain program on your PC. The methods below use the EntireX Broker kernel as an example. For other EntireX components, see the list of executables and port numbers for the relevant information.

This chapter contains the following topics:

- Method 1 - Allow a Specific Executable to Open a Port
- Method 2 - Allow a Specific Port to be used on your PC
- Overview of Executables and Port Numbers

Method 1 - Allow a Specific Executable to Open a Port

This method involves adding the broker kernel as an "allowed program". This means it can open any port for both TCP and UDP communication.

> To add the broker kernel as an allowed program

- Enter command:

```
C:\>netsh firewall add allowedprogram
program="C:\SoftwareAG\EntireX\bin\etbnuc.exe"
name="EntireX Broker Kernel" profile=ALL
```

➤ To remove the broker kernel as an allowed program

- Enter command:

```
C:\>netsh firewall delete allowedprogram
program="C:\SoftwareAG\EntireX\bin\etbnuc.exe"
profile=ALL
```

This example is for the EntireX Broker kernel program. To add other EntireX components as allowed programs, see *Overview of Executables and Port Numbers* below.

Method 2 - Allow a Specific Port to be used on your PC

This method involves opening a specific port for all programs.

➤ To open a specific port

- Enter command:

```
C:\>netsh firewall add portopening protocol=TCP
port=1971 name="EntireX Broker Kernel" profile=ALL
```

➤ To close a specific port

- Enter command:

```
C:\>netsh firewall delete portopening protocol=TCP
port=1971 profile=ALL
```

This example is for the EntireX Broker kernel program. To open a port for other EntireX components, see *Overview of Executables and Port Numbers* below.

Overview of Executables and Port Numbers

To run all of EntireX and its subprograms you will need to open a variety of communications ports, depending on the functionality you are using. Below is a list of programs that need to establish communications ports. You may choose which of the programs or ports you want to use on the PC.

It is important to note that the file locations and the port numbers listed are the default settings. These parameters may be customized during the installation process. If you did not install using the default settings, you will need to use your custom parameters.

See *Method 1 - Allow a Specific Executable to Open a Port* and *Method 2 - Allow a Specific Port to be used on your PC* for the syntax required.

Component	Method 1			Method 2	Notes
	Program Name	Executable	File Location	Default Port Numbers	
EntireX Broker Kernel	EntireX Broker Kernel	etbnuc.exe	C:\SoftwareAG\EntireX\bin\	TCP port: 1971 SSL port: 1958	
EntireX Broker Administration Service	EntireX Broker Administration Service	etbnuc.exe	C:\SoftwareAG\EntireX\bin\	TCP port: 57707 SSL port: 57708	
EntireX Broker Agent	Broker Agent (com.softwareag.entirex.ba.BrokerAgent)	java.exe	%JAVA_HOME%\bin\java.exe (see note *)	TCP port: 3000	When administrating the EntireX Broker Agent/SSL Broker Agent with System Management Hub, <i>javaw.exe</i> must be allowed. *The Windows Firewall requires the full path name of the <i>javaw.exe</i> . The SMH Broker Agent uses the
SSL Broker Agent	SSL Broker Agent (com.softwareag.entirex.ba.SSLBrokerAgent)	java.exe	%JAVA_HOME%\bin\java.exe	TCP port: 1958	<i>javaw.exe</i> that is located in the path %CommonProgramFiles%\SoftwareAG\jre<java version>\bin\javaw.exe. This is the <i>javaw.exe</i> that must be allowed.
Software AG Web Server	Software AG Web Server	java.exe	%JAVA_HOME%\bin\java.exe	HTTP: 10010 (Base port)	Method 1 requires that you allow <i>java.exe</i> and/or <i>javaw.exe</i> , which will allow all Java-based programs to open ports. If you do not want to allow this, use method 2 and specify just the port number.
System Management Hub	Web User Interface Ports		C:\SoftwareAG\EntireX\smh\bin	HTTP port:10010 HTTPS port:10011 TCP/IP port:10013	You can configure these port numbers during or after installation of System Management Hub. Depending on the components installed, some may not be used.
	CS Layer Server	argsrv.exe		HTTP port:10015 HTTPS port:10012 TCP/IP port:10014	

(*) Optional, because this port is used only for outgoing packages.