



# LogicBlaze FUSE for WebSphere Application Server Community Edition Integration Guide



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## **LogicBlaze FUSE for WebSphere Application Server Community Edition Integration Guide**

This document shows how to install and run LogicBlaze FUSE integrated with WebSphere Application Server Community Edition (WAS CE).

## 1. Introduction

The LogicBlaze FUSE for WebSphere Application Server Community Edition (WAS CE) product is an integration of LogicBlaze FUSE and WAS CE. It is downloadable via an automatic installer for Windows, Linux and MAC platforms. For convenience and ease-of-use LogicBlaze FUSE and WAS CE are pre-configured, so there is no setup needed - just download it and start it running.

## 2. Installation Requirements

### Hardware:

80 - 90 MB of free disk space for the LogicBlaze FUSE and WAS CE distribution.

### Operating Systems:

Windows: Windows XP SP2, Windows 2000.

Unix: Ubuntu Linux, Powerdog Linux, MacOS, AIX, HP-UX, Solaris, any Unix platform that supports Java.

### Environment:

Java Developer Kit (JDK) 1.4.x.

The JAVA\_HOME environment variable must be set to the directory where the JDK is installed, for example, `c:\Program Files\jdk.1.4.x`.

### Versions:

The LogicBlaze FUSE WAS CE distribution includes:

- LogicBlaze FUSE 1.x with Apache ActiveMQ 4.x.
- Websphere Application Server Community Edition V1.0.0.1. This version is based on Geronimo 1.0 which supports ActiveMQ 3.2.x.

## Notes

WAS CE and LogicBlaze FUSE include some common subsystems. Specifically, they both include Apache ActiveMQ and Apache Derby. They also both include web containers: Jetty is embedded in FUSE and WAS CE has an embedded Tomcat. These commonalities cause port conflicts that have been resolved in the following way:

- WAS CE has been configured to run on port 9090, instead of 8080. The embedded Jetty in FUSE has been left on port 8080.
- There are two Apache ActiveMQ (AMQ) brokers running: ActiveMQ 3.2.1 in WAS CE and ActiveMQ 4.1 in LogicBlaze FUSE. WAS CE 1.0.x does not support AMQ 4.x and would need to have some major changes both in WAS CE and ActiveMQ to support AMQ 4.x.

The default port of ActiveMQ in FUSE has been changed to 61618. WAS CE will continue to start AMQ 3.2.1 on port 61616.

The Apache Derby database in FUSE is present, but not used in this implementation, instead FUSE will use the WAS CE implementation of Apache Derby. When LogicBlaze FUSE is started on WAS CE it detects the existing Derby database and uses it.

LogicBlaze FUSE was developed on JDK 1.5.x as were some of the examples for FUSE, most notably the Loan Broker Demo. These examples will not be able to run on LogicBlaze FUSE for WAS CE version 1.x.

### 3. Downloading and Deploying FUSE for WAS CE

To deploy LogicBlaze FUSE on WAS CE download the `FUSE_WASCommunityEdition` automatic installer for your platform, run it and then startup WAS CE. The installer downloads both LogicBlaze FUSE and WAS CE in a single bundle. Both are pre-configured and ready to run.

To download and install the LogicBlaze FUSE for WAS CE distribution follow the instructions below.

1. From a browser, navigate to <http://www.logicblaze.com> and click the “Products” link at the top of the page.
2. Click the “Download FUSE” link and follow the instructions on the Web page.
3. You will receive an email with a list of files available for download. Select the appropriate installer for your operating system. If you need help choosing an installer please refer to the *Choosing Your Installation File* section of the *LogicBlaze FUSE Getting Started Guide*.

Select the `FUSE_WASCommunityEdition` installer for your platform, e.g., for Windows, Linux or MAC. For example, on a Windows system select: `FUSE-WASCE_win.exe`.

4. Follow the prompts in the pop-up window to either Save or Open the installer.
5. After the download completes, click the Run button in the pop-up window. Then follow the prompts in the InstallAnywhere window.

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Make note of the directory in which you install LogicBlaze FUSE for WAS CE. This information will be necessary for running WAS CE and automatically deploying LogicBlaze FUSE on it.

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6. Start WAS CE. From a command shell:
  1. Set the `GERONIMO_HOME` environment variable to the FUSE WAS CE directory (the directory you installed the files in), for example on a Windows platform. For example:

```
set GERONIMO_HOME=\dev\FUSE-WASCE\FUSE_WASCommunityEdition
```

2. Set your `JAVA_HOME` environment variable to a 1.4.x version of the JDK. You can use 1.5, but it is not supported by WAS CE.
3. Change to the `FUSE_WASCommunityEdition` directory and then type:

```
bin\startup
```

It will take a minute or so to fully start WAS CE.

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Note that LogicBlaze FUSE is automatically deployed and started on the WAS CE application server. You can see this from the WAS CE Administration console. To do so, proceed to the *Verifying the Installation* section of this document.

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## 4. Verifying the Installation

To test if LogicBlaze FUSE has been deployed on WAS CE:

1. Open the WAS CE Administration Console. From a browser navigate to `http://localhost:9090/console` and login in.  
Recall that WAS CE's default port of 8080 has been changed to 9090 for this installation.  
The username is "system" and the default password is "manager".
2. From the Console Navigation bar on the left-hand side of the window, select `System Modules`. In the `Installed System Modules` view you will see the LogicBlaze FUSE deployment (at or near the bottom of the list):

```
logicblaze/fuse/1.0-SNAPSHOT/car
```

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**Console Navigation**

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**Installed System Modules** [view]

Component Name	State	Commands
geronimo/activemq-broker/1.0/car	running	<a href="#">Stop</a> <a href="#">Uninstall</a>
geronimo/client-corba/1.0/car	stopped	<a href="#">Start</a> <a href="#">Uninstall</a>
geronimo/client-security/1.0/car	stopped	<a href="#">Start</a> <a href="#">Uninstall</a>
geronimo/client-system/1.0/car	stopped	<a href="#">Start</a> <a href="#">Uninstall</a>
geronimo/client/1.0/car	stopped	<a href="#">Start</a> <a href="#">Uninstall</a>
geronimo/geronimo-gbean-deployer/1.0/car	running	<a href="#">Stop</a> <a href="#">Uninstall</a>
geronimo/hot-deployer/1.0/car	running	<a href="#">Stop</a> <a href="#">Uninstall</a>
geronimo/j2ee-corba/1.0/car	stopped	<a href="#">Start</a> <a href="#">Uninstall</a>
geronimo/j2ee-deployer/1.0/car	running	<a href="#">Stop</a> <a href="#">Uninstall</a>
geronimo/j2ee-security/1.0/car	running	<a href="#">Stop</a> <a href="#">Uninstall</a>
geronimo/j2ee-server/1.0/car	running	<a href="#">Stop</a> <a href="#">Uninstall</a>
geronimo/j2ee-system/1.0/car	running	<a href="#">Stop</a> <a href="#">Uninstall</a>
geronimo/javamail/1.0/car	stopped	<a href="#">Start</a> <a href="#">Uninstall</a>
geronimo/online-deployer/1.0/car	stopped	<a href="#">Start</a> <a href="#">Uninstall</a>
geronimo/rmi-naming/1.0/car	running	<a href="#">Stop</a> <a href="#">Uninstall</a>
geronimo/shutdown/1.0/car	stopped	<a href="#">Start</a> <a href="#">Uninstall</a>
geronimo/tomcat-deployer/1.0/car	running	<a href="#">Stop</a> <a href="#">Uninstall</a>
geronimo/tomcat/1.0/car	running	<a href="#">Stop</a> <a href="#">Uninstall</a>
logicblaze/fuse/1.0-SNAPSHOT/car	running	<a href="#">Stop</a> <a href="#">Uninstall</a>

Figure 4-1-: WAS CE Installed Systems Module

- You can run the LogicBlaze FUSE console or the LogicBlaze FUSE Ajax demo. From a browser, navigate to <http://localhost:8080>. From there you can select the FUSE Console or you can choose to run the Ajax Demo.

## 5. Additional Resources

For information on the LogicBlaze FUSE Console, please see the *LogicBlaze FUSE Console Guide*.

For more information on getting started, please see the *LogicBlaze FUSE Getting Started Guide*.

For information about WAS CE, please see: <http://publib.boulder.ibm.com/wasce/V1.0.0.1/>.