Progress FUSE

FUSE™ Message Broker

Installation Guide

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Installation Guide

Version 5.3

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Chapter 1. Installation Prerequisites

Before attempting to install and use FUSE Message Broker, make sure your system meets the minimum requirements.

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Before installing FUSE Message Broker, do the following:

1. Read this guide to understand the installation process.
2. Make sure your systems meet the minimum requirements for installing and using FUSE Message Broker.

Supported Platforms

Progress tests and supports FUSE products on the platforms listed at http://fusesource.com/downloads/platforms-supported/.

Support for additional operating systems and versions is considered on a case-by-case basis.

Java and Compiler Requirements

Java Runtime

To run applications developed with FUSE Message Broker, you must have JRE 1.5.0_11 or newer.

Java Development

To develop applications using FUSE Message Broker, you must have JDK 1.5.0_11 or newer.

Non-Sun Java distributions

Only JREs and JDKs distributed or OEMed from Sun Microsystems are supported. FUSE Message Broker is not guaranteed to run with gcj.

On Red Hat-derived Linux systems, gcj is the default Java distribution. In these cases, you must download and install a Sun JRE/JDK and set the `JAVA_HOME` environment variable. You can also integrate the Sun JRE/JDK into the `alternatives(1)` system. See the `alternatives(1)` man page for details.

Other Suggested Prerequisites

These programs are not *required* to work with FUSE Message Broker. However, they are required to build the product from the source code. They are also used extensively by the sample applications.

Apache Ant

Building FUSE source and sample code requires Apache Ant 1.6.5 or later; you can download it from http://ant.apache.org/bindownload.cgi.

After unzipping the Apache Ant distribution, you must:

1. Set the `ANT_HOME` environment variable to the top-level directory where you unzipped Apache Ant.
2. Add Apache Ant's `bin` directory to your PATH.

Apache Maven

Apache Maven is a popular build management tool. FUSE source builds require Apache Maven 2.0.9 or later; you can download Apache Maven from http://maven.apache.org/download.html.

Once you have installed Apache Maven, you must:

1. Set the `M2_HOME` environment variable to point to the top-level directory that contains your Maven installation.
2. Add Maven's `bin` directory to the `PATH`.
3. Set the `MAVEN_OPTS` environment variable to `-Xmx512M` to give the Maven build more memory in which to run.

Environment Scripts

You can create scripts like the one shown here to make all settings for the required programs. You must adjust the paths in these examples to reflect your actual installed locations of Ant, Maven, and the JDK.

Example 1.1. Windows Environment Script

```
set JAVA_HOME=C:\Progra~1\Java\jdk1.5.0_11
set ANT_HOME=C:\Ant
set M2_HOME=C:\Maven
```

```
set PATH=%JAVA_HOME%\bin;%PATH%
set PATH=%ANT_HOME%\bin;%PATH%
set PATH=%M2_HOME%\bin;%PATH%
set MAVEN_OPTS=-Xmx512M
```

Example 1.2. UNIX and Linux Environment Script

```
export JAVA_HOME=/usr/lib/jvm/java-1.5.0-sun
export ANT_HOME=/opt/ant
export M2_HOME=/opt/maven
export PATH=$JAVA_HOME/bin:$PATH
export PATH=$ANT_HOME/bin:$PATH
export PATH=$M2_HOME/bin:$PATH
export MAVEN_OPTS=-Xmx512M
```

Disk Space Requirements

Table 1.1 on page 14 shows the amount of disk space you will need to install FUSE Message Broker.

Table 1.1. Disk Space Requirements

Installation Type	Windows	Linux
As installed by the Java installer	34 MB	34 MB
Source installation, as installed	17 MB	20 MB
Source installation, after building	200 MB [a]	210 MB [a]

[a] plus up to 600 MB placed in the Maven `$HOME/.m2` and `.maven` directories.

Chapter 2. Installing FUSE Message Broker

The cross-platform FUSE Message Broker installer makes it easy to install the tools needed to build and deploy the FUSE Message Broker.

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Installer Files

Table 2.1 on page 16 lists the available installation files for FUSE Message Broker.

Table 2.1. Installer Files

File	Description
`fuse-message-broker-5.3.0.0-windows.exe`	Installer for Windows platforms.
`fuse-message-broker-5.3.0.0-unix.bin`	Installer for Linux, OS X, and all UNIX platforms.
`fuse-message-broker-5.3.0.0-src.zip`	Source code installation package for all platforms. If you prefer to build FUSE Message Broker from source, see "Installing from Source Code" on page 25.

Running the Installer

The installer is a Java application that can run in one of three modes:

- GUI on page 18
- Console on page 20
- Silent on page 22

Warning

Under certain conditions, the UNIX installer might throw an `InvocationTargetException>` exception.

This is the result of a known bug in InstallAnywhere when `gcj` is the default Java version. The workaround is to install a Sun JVM and make sure its `java` executable is before any others on your path.

Installing in GUI Mode

Overview

By default, the installer runs as a Java GUI. In this mode, you have full control over what is installed on your local machine.

Running the installer

Use the following steps to install FUSE Message Broker in GUI mode:

1. For UNIX, log in as (or **su** to) the username that will own the FUSE Message Broker installation. The default installation path presumes your have root access, but you can specify any installation directory for which you have write rights.
2. Start the installer by entering the following command:

   Table 2.2. Command for Running the Installer in GUI Mode

Platform	Command
Windows	`fuse-message-broker-5.3-windows.exe`
UNIX	`sh fuse-message-broker-5.3-unix.bin`

3. Click **Next**.
4. Read and accept the **License Agreement**, then click **Next**.
5. Specify the top-level directory for your installation.

   Table 2.3. Default Installation Directory

Platform	Default Value
UNIX	`/opt/iona/fuse-message-broker-5.3`
Windows	`C:\IONA\fuse-message-broker-5.3`

Tip

Click **Choose** to select a path by navigating to it.

6. Click **Next**.

7. If you are installing on Windows you will need to specify where the installer will create program icons.

Tip

If you want to install the icons for all users check the **Create Icons for All Users** box.

8. Click **Next**.
9. Review the installation summary.

   If you see something you need to correct, click the **Previous** button to go back through the installation steps.

   If the summary is correct, click **Install**.
10. Choose whether you want the installer to save the selected options in a properties file.

    The properties file is used to perform identical installations on other machines in a silent installation, as described in "Installing in Silent Mode" on page 22.
11. Click **Next**.
12. If you choose to save the installer properties, enter a path name for the properties file and click **Next**.
13. Click **Next**.
14. Click **Done** to complete the installation.

Installing in Console Mode

Overview

The installer's console mode is provided for situations where you want to have control over what is installed, but cannot launch a Java GUI. In console mode, you are presented with the same options as in GUI mode.

Note

Console mode is only for UNIX and Linux systems. Do not use the *-i console* option when installing on Windows.

Running the Installer

Use the following steps to install FUSE Message Broker using console mode:

1. Start the installer:

```
sh fuse-message-broker-5.3-unix.bin -i console
```

2. Press **Enter** a number of times to page through the license agreement.
3. Accept the license agreement by entering **Y**.

Note

Entering **N** exits the installer.

4. Press **Enter**.
5. Enter your the full path to a top-level directory to contain your installation.
6. Review the installation summary.
7. If the summary is correct, press **Enter**.

Tip

You can type **back** to step backwards through the installer if the summary is not correct.

8. Choose whether to create a properties file.

The properties file can be used to perform identical installations on other machines, as described in "Installing in Silent Mode" on page 22.

9. If you choose to save the installer properties, enter a path name for the properties file.

10. Press **Enter** to exit the installer.

Installing in Silent Mode

Overview

The installer's silent mode is intended for use in installing on remote machines. It is also useful for administrators to set up installations in which the person installing cannot change any installation options. You can customize how FUSE Message Broker is installed by providing an `installer.properties` file specifying the options you wish to install.

Running the Installer

To install FUSE Message Broker using the silent installation mode, do the following:

1. If you do not want a default installation, create an `installer.properties` file that specifies how you want FUSE Message Broker installed.

   You can create an `installer.properties` file in one of two ways:

   - Save one when running the installer in GUI or console mode.
   - Create a new one using a text editor. See Table 2.5 on page 23 for the possible entries.

2. Run the installer using the following command:

Table 2.4. Command for Running the Installer in Silent Mode

Platform	Command
Windows	**`fuse-message-broker-5.3-windows -i silent [-f installer.properties]`**
UNIX	**`sh fuse-message-broker-5.3-unix.bin -i silent [-f installer.properties]`**

The `-f` argument instructs the installer to load the specified properties file. (If you specify `-i silent` without the `-f` argument, the installer silently performs a default installation.)

Silent Installation Properties

Table 2.5 on page 23 shows the properties you can set and their possible values.

Note

When specifying Windows paths, escape the colon in drive letter specifications with a backslash, and double any backslash path separators. In your JDK_HOME entry, you can use the 8.3 version of space-containing directory names, but do not use space-containing path components in your USER_INSTALL_DIR entry. (Use DIR /X to determine the 8.3 version of file and directory names.)

Table 2.5. Installer Properties

Property	Values	Description
USER_INSTALL_DIR	The full path to the top-level directory where you want the product installed.	Specify a full absolute path, making sure no path component has a space in its name.
CHOSEN_INSTALL_FEATURE_LIST	There is only one feature component for FUSE Message Broker, `AMQ`.	
SILENT_ACCEPT_LICENSE_AGREEMENT	`true` (default) or `false`	Specifies whether the installer accepts the license agreement without prompting.
JDK_HOME	The full absolute path to the JDK that FUSE Message Broker will use.	This is the same path that should be set in the `JAVA_HOME` environment variable.
INSTALLER_UI	`silent`, `gui` (default), or `console`	Specifies the mode in which the installer runs.
USER_INPUT_SAVE_PROPERTIES_YES_NO	`Yes` (default) or `No`	Specifies whether you want to save a properties file that describes the current run of the installer.
SET_PATH	This entry is not used by the FUSE Message Broker installer.	

Example Installer Properties File

Example 2.1 on page 23 shows a sample `installer.properties` file for a Windows system.

Example 2.1. Installer Properties File

```
❶ USER_INSTALL_DIR=C\:\\iona\\fuse-message-broker-4.1
   CHOSEN_INSTALL_FEATURE_LIST=AMQ
❷ SILENT_ACCEPT_LICENSE_AGREEMENT=true
```

```
❸ JDK_HOME=C\:\\Progra~1\\Java\\jdk1.5.0_11
❹ INSTALLER_UI=silent
❺ USER_INPUT_SAVE_PROPERTIES_YES_NO=No
```

The properties file shown in Example 2.1 on page 23 tells the installer to do the following:

❶ Install FUSE Message Broker into `C\:\\iona\\fuse-message-broker-4.1`.

❷ Accept the license agreement without prompting.

❸ Use the specified JDK.

❹ Run the installer silently.

❺ Do not save an `installer.properties` file.

Chapter 3. Installing from Source Code

The FUSE Message Broker source distribution includes the source code and tools for building a number of the components included in FUSE Message Broker. Once built, you can use them to create an installation of FUSE Message Broker.

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Before installing FUSE Message Broker from source code, do the following:

1. Read this chapter to make sure you understand the build process.
2. Make sure your system has the required tools for building from source.
3. Make sure your system meets the minimum requirements for using FUSE.

Unpacking the Distribution

The source distribution is packaged as a `.zip` file that must be unpacked before you can build the FUSE Message Broker installation. Unpack the distribution into a directory to which you have full access.

Warning

Do not unpack the archive file into a folder that has spaces in its path name. For example, do not unpack into `C:\Documents and Settings\Greco Roman\Desktop\fusesrc`.

Building the Source

Build the FUSE Message Broker distribution using the instructions in this section.

Build Commands

Follow these steps to build the entire distribution.

1. Change to the `src` subdirectory of the folder into which you unpacked the source distribution.
2. Run the following command:

```
mvn install -Dmaven.test.skip=true
```

Tip

If you have errors building the source distribution, try removing your private Maven repository (*`$HOME`*`/.m2/repository/*`), then running **`mvn -U install`**.

You can run the same build including all unit tests by removing the `-Dmaven.test.skip=true` argument from the above command. Note that building with tests enabled takes much longer.

Distribution Files Built

When the build runs successfully, FUSE Message Broker distribution `.zip` and `.tar.gz` files are found (where version is 5.3.0.2) in the `apache-activemq-5.3.0.2-fuse/src/assembly/target` folder of the source installation directory.

To install FUSE Message Broker from the a newly built distribution file, unzip its contents into the directory of your choice.

Chapter 4. Uninstalling FUSE Message Broker

This chapter describes how to uninstall FUSE Message Broker.

Uninstalling On Windows Systems

To uninstall FUSE Message Broker on a Windows system, do the following:

1. From the Windows **Start** menu, select **(All) Programs** → **IONA** → **FUSE Message Broker 5.3** → **Uninstall FUSE Message Broker 5.3**.
2. Click **Uninstall**.

As an alternative, you can run the following from a command prompt:

```
InstallDir\uninstall\uninstall-fuse-message-broker.exe
```

Uninstalling on UNIX Systems

To uninstall FUSE Message Broker on Linux and UNIX systems, run the following script:

```
InstallDir/uninstall/uninstall-fuse-message-broker
```

Important

Remember that after a silent installation, the next uninstallation is also run silently.