

# Getting Started

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The purpose of this document is to provide a starting point for those new to ServiceMix and OSGi. Please read through each section here and if you have any questions, please just hop on the ServiceMix user [mailing list](#) to ask any questions you might have.

## Introduction, OSGi and ServiceMix

ServiceMix is a complete and professional integration platform powered by OSGi. It provides an enterprise ready powerful Enterprise Service Bus (ESB). Thanks to OSGi, ServiceMix is a highly configurable platform and allow you to extend it very easily.

OSGi is a dynamic module system for Java. OSGi provides the standardized primitives that allow applications to be constructed from small, reusable and collaborative components.

The OSGi Service Platform provides the functions to change the composition dynamically on the device of a variety of networks, without requiring restarts. To minimize the coupling, as well as make these couplings managed, the OSGi technology provides a service-oriented architecture that enables these components to dynamically discover each other for collaboration.

ServiceMix integrates a large number of projects such as:

- [Apache Karaf](#) is the ServiceMix kernel
- [Apache ActiveMQ](#) as message broker
- [Apache Camel](#) as message routing, components provider and EIP framework
- [Apache CXF](#) as WS-\* and RESTful WebService provider
- [Apache ODE](#) as WS-BPEL embedded engine

## Tutorials

The [Tutorials](#) section is the next step. These tutorials walk you through the basic use of the technology and show you how to build various examples. We are working to continually add new tutorials so please check back often. If there is a use case that you'd like to see, please hop on the ServiceMix user [mailing list](#) to discuss it. We're all very interested in what you'd like to see and we highly encourage contributions from the community.

## Installing the ServiceMix Binary Distribution

### Pre-Installation Requirements

#### Hardware:

- 100 MB of disk space for the ServiceMix 4.x binary distribution.

#### Operating Systems:

- Windows: Windows XP SP2, Windows 2000, Windows Vista, Windows 7
- Unix: Any Linux/Unix platform that supports Java

#### Environment:

- Java Developer Kit (JDK) 1.6.x (Java 6) or better for both deployment and compiling.

### Binary Distribution Installation Procedure

This procedure explains how to download and install the binary distribution.

1. Download the binary distribution for your platform (either a tarball or a zip file). The latest release can be downloaded here: <http://servicemix.apache.org/download.html>
2. Extract the download into a directory of your choice.
3. Proceed to the [#Starting ServiceMix](#) section of this document.

### Starting ServiceMix

This section provides instructions on starting ServiceMix from both Windows and Unix platforms. Below are the steps to follow:

```
> cd <SERVICEMIX_HOME>
```

The <SERVICEMIX\_HOME> above is just simply a placeholder for the ServiceMix binary distribution directory, i.e., the directory you expanded from the downloaded tarball or zip file.

**Windows:**

```
> .\bin\servicemix.bat
```

**Linux/Unix:**

```
$ ./bin/servicemix
```

ServiceMix start and you are in the ServiceMix shell.

Do not close the console or shell in which ServiceMix was started, as that will terminate ServiceMix (unless ServiceMix was started with nohup).

You can also start ServiceMix directly in background:

**Windows:**

```
> .\bin\start.bat
```

**Linux/Unix:**

```
$ ./bin/start
```

## Stopping ServiceMix

For both Windows and Unix installations, terminate ServiceMix by typing "CTRL-D" on the command line where ServiceMix is running.

You can also type "osgi:shutdown" in the ServiceMix shell.

If you started ServiceMix in background, you can use:

**Windows:**

```
> .\bin\stop.bat
```

**Linux/Unix:**

```
$ ./bin/stop
```