

# Agent SDK for Java

The **Agent SDK for Java** allows you to leverage the Perspectium Replication Framework to write your own Java applications to consume and produce messages with the Perspectium Integration Mesh. This provides you a way to integrate custom applications with Perspectium-supported applications.

## Procedures

To set up the Agent SDK, follow these steps:

---

1

### Installation

Once you have obtained your Perspectium Agent SDK Account from [Perspectium Support](#), you will need to add the Perspectium Maven Repository URL and login credentials to your Maven settings.xml file and your SDK project pom.xml file.

---

2

### Setting up settings.xml

Since the Perspectium Nexus server requires authentication, you will also need to place your credentials in the Maven `settings.xml` in a servers element. There are two locations where a `settings.xml` file may live:

```
Maven install: $M2_HOME/conf/settings.xml  
User's install: ${user.home}/.m2/settings.xml
```

Here's a sample servers element using the default username and password for the deployment user:

```
<servers>  
  <server>  
    <id>perspectiumRepo</id>  
    <username>your_username</username>  
    <password>your_password</password>  
  </server>  
</servers>
```

3

### Setting up pom.xml

Next, create a `pom.xml` file for your Java project with a dependency to the Perspectium Agent SDK library. The `pom.xml` will look similar to this:

```
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd
/maven-4.0.0.xsd">
    <modelVersion>4.0.0</modelVersion>

    <groupId>com.yourcompany</groupId>
    <artifactId>test-perspectum-sdk</artifactId>
    <version>1.0-SNAPSHOT</version>

    <dependencies>
        <dependency>
            <groupId>com.perspectum</groupId>
            <artifactId>perspectum-replicator-agent</artifactId>
            <version>5.0.0</version>
        </dependency>
    </dependencies>

    <repositories>
        <repository>
            <id>perspectum</id>
            <name>Perspectum</name>
            <url>https://nexus.perspectum.net/repository/public/</url>
        </repository>
    </repositories>
</project>
```

4

See [Writing Agent SDK handlers](#)

## Sample Project

Click [here](#) to download a sample Java project that uses the Agent SDK. This project requires you have [JDK](#) and [Maven](#) installed on your computer.

You can import the project into your Integrated Development Environment (IDE) such as [Eclipse](#) or you can build the project and run the application in a terminal window.

To build and run in a terminal, follow these steps:

1

### Unzip the attachment

Navigate to the folder where you downloaded the sample Java project zip file and unzip the file.

2

### Build the project

Open up a terminal window and go into the directory where the file was unzipped and enter the following command to build the project:

```
mvn clean install  
./start.sh
```

This will use Maven to compile and build the project into a Java application that can then be run.



### Run the application

In the same terminal window and in the same directory as the previous step, run the following command to run the application:

```
./start.sh
```

You will see the Java application publish messages and consume messages, logging out as it does these actions.

---