



Informatica® Multidomain MDM
10.3

Business Process Manager (BPM) Adapter SDK Implementation Guide

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Preface

The *Multidomain MDM Business Process Manager Adapter SDK Implementation Guide* describes how to implement a business process manager (BPM) adapter by using the SDK interfaces to integrate to an external workflow engine. An adapter implementation can be used by the MDM Hub and Data Director to communicate with a BPM engine.

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CHAPTER 1

Overview of BPM Adapter SDK

This chapter includes the following topics:

- [BPM Adapter SDK, 6](#)
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BPM Adapter SDK

The BPM Adapter SDK provides an out-of-the-box (OOB) Eclipse project for developers to build adapter implementations. The Eclipse project references `informatica-bpm-adapter.jar` that contains the interfaces and supporting classes for the SDK.

Prerequisites

Before you begin, verify that the following software is installed:

1. Multidomain MDM
2. Resource Kit with the BPM SDK

For instructions, see the *Multidomain MDM Installation Guide*.

CHAPTER 2

BPM Adapter SDK Implementation

This chapter includes the following topics:

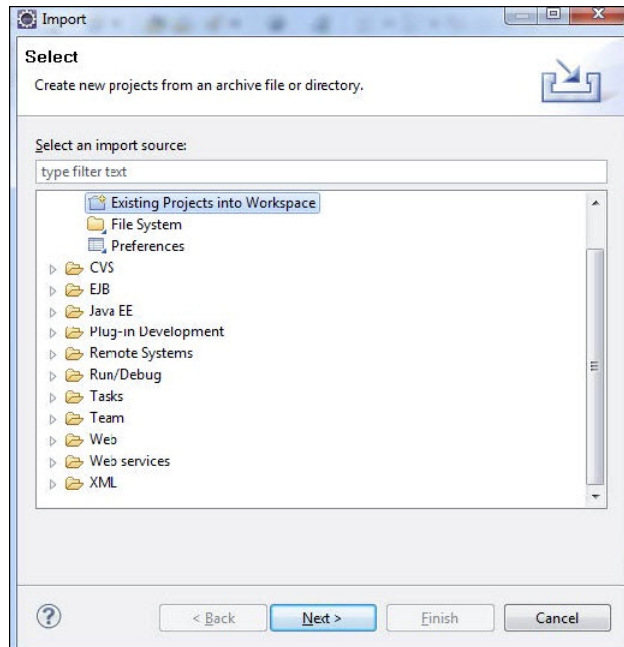
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- [Using the BPM Adapter Implementation, 12](#)
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Step 1: Importing BPM-SDK Eclipse Project

To import the OOB BPM-SDK Eclipse project into the Eclipse workspace, perform the following steps.

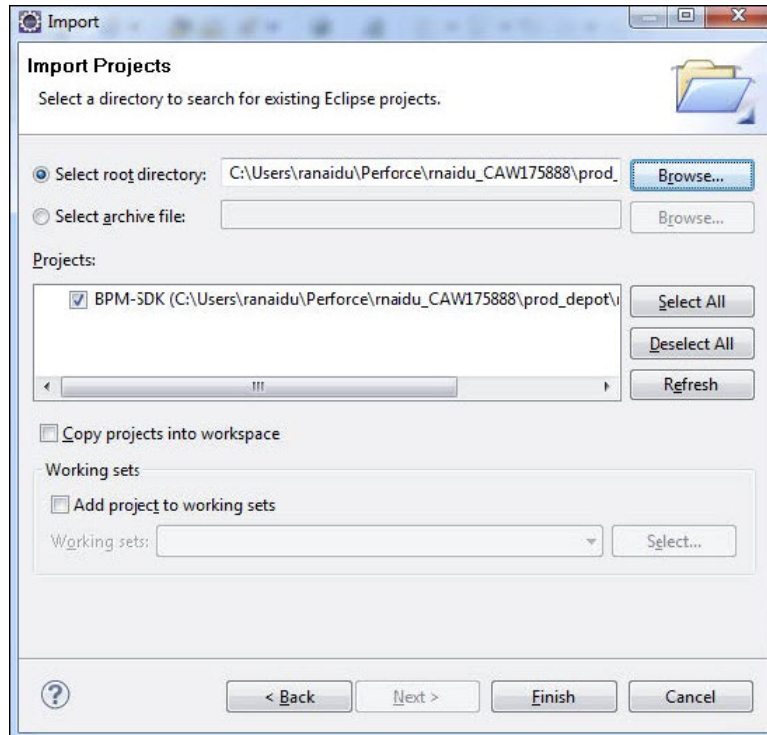
1. Launch Eclipse IDE.

2. Click **File > Import**.



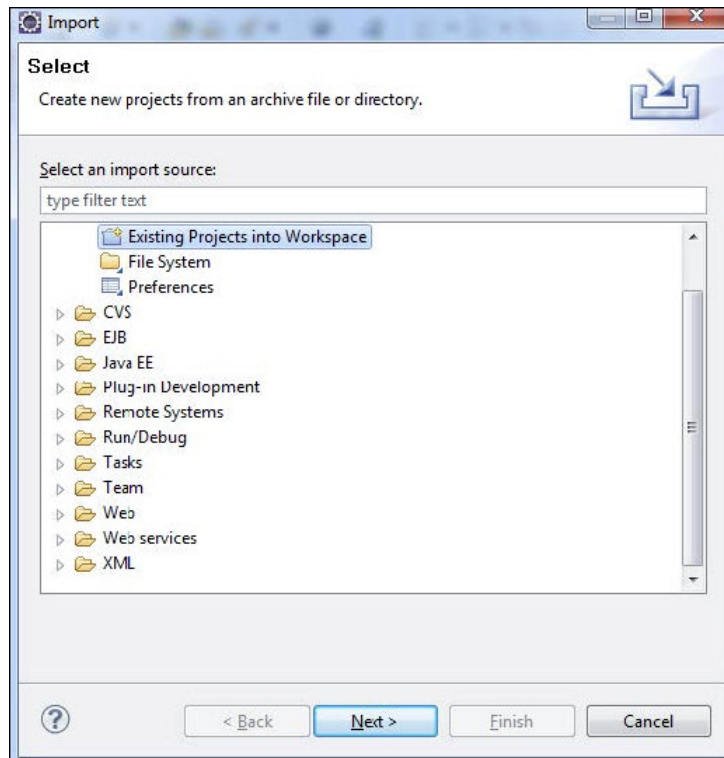
3. Select **Existing Projects into Workspace** and click **Next**. Browse to the location of the bpm sdk directory within the Resource Kit.

The BPM-SDK project is displayed under **Projects**.



4. Click **Finish**.

The BPM-SDK project is imported into the Eclipse workspace.



Step 2: Implementing Adapter Interfaces

The BPM Adapter SDK contains two interfaces that is `IBPMProcessGenerator` and `IBPMAdapter`.

IBPMProcessGenerator

Informatica MDM Hub uses an implementation of this interface to generate merge tasks for match table records.

IBPMAdapter

The Informatica Data Director (IDD) uses an implementation of this interface to provide workflow capabilities. It provides the basic functionality to create and manage tasks.

These interfaces are available in the package `com.informatica.mdm.bpm.interfaces`. You must implement these interfaces to communicate with a BPM engine. The implementation can be used by the MDM Hub or IDD. For details on the classes included in the SDK, refer to the Javadoc included in the BPM-SDK.

Step 3: Implementing Data Interfaces

All data interfaces used by the adapter interfaces are in the package `com.informatica.mdm.bpm.interfaces.data`. There are two main input parameters for the APIs:

ITaskData

This is used to pass task related data to the methods of `IBPMAdapter` and `IBPMProcessGenerator`. This also has place holders for any records associated with the task.

IApplicationContext

This represents an application context that is passed to the adapter interfaces. This has no methods or members. The calling application can implement this interface to pass any application specific details to a BPM adapter implementation.

Note: The BPM Adapter SDK includes an implementation of the data interfaces used by IDD. These are available in the package `com.informatica.mdm.bpm.idd`.

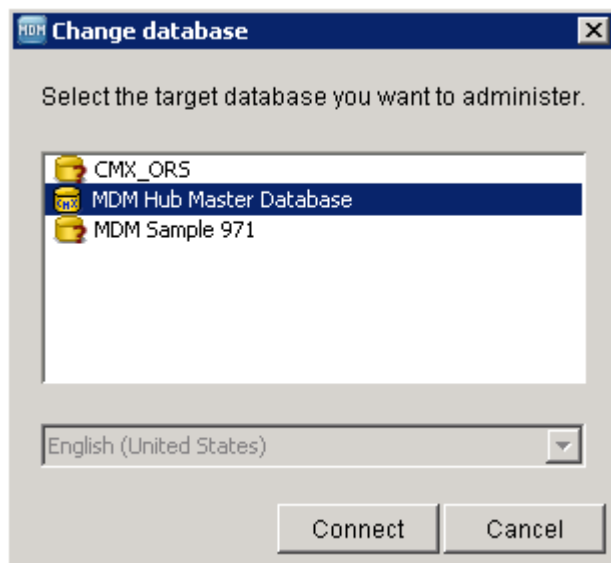
Step 4: Creating an Implementation JAR

An ant script called `build.xml` is provided for developers to package the implementation into a JAR file. All classes under the output directory are included in the resulting JAR.

Step 5: Uploading the Implementation to the MDM Hub

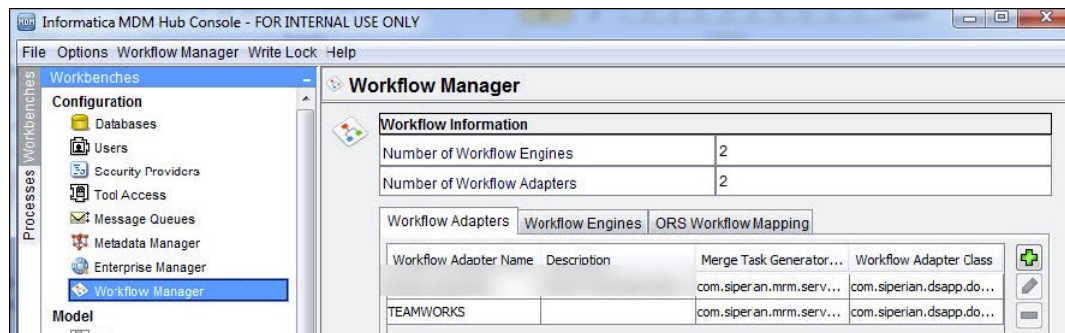
The implementation JAR must be uploaded to the as follows.

1. Launch the MDM Hub and log in to the MDM Hub Master Database.



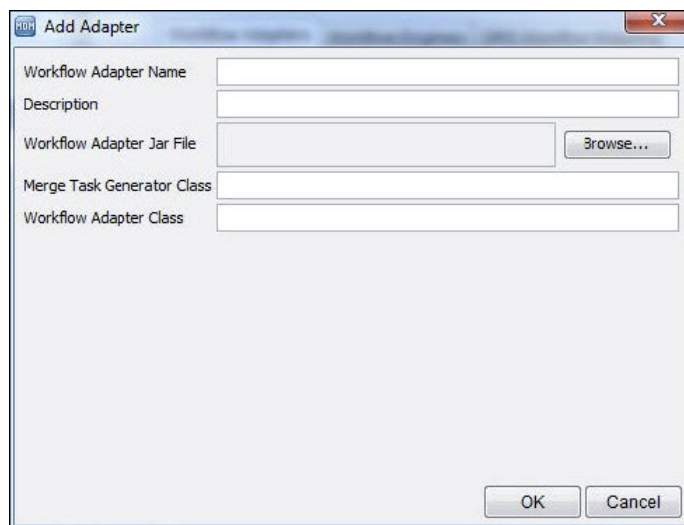
2. Select **Workflow Manager** from **Workbenches**.

A list of workflow adapters registered with the MDM Hub appears.



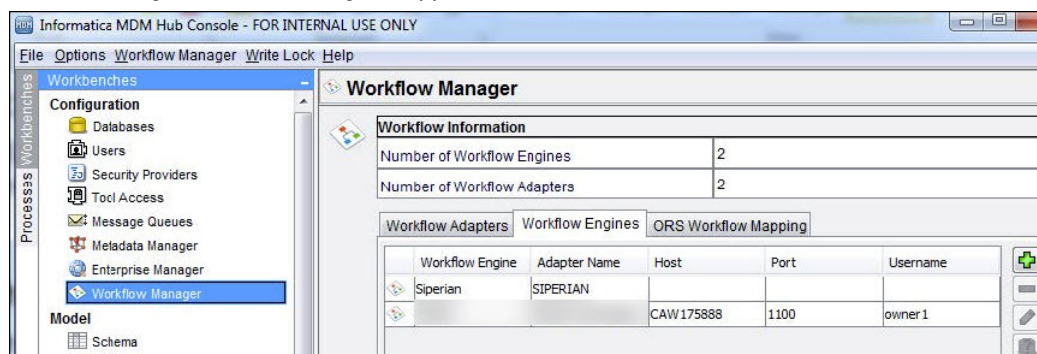
3. Click the **Add** button (green plus symbol) to register a new adapter.

The **Add Adapter** dialog appears.



4. Enter the workflow adapter name and description. Click **Browse** to upload the adapter implementation jar created earlier.
5. Click **OK**. The workflow adapter is added to the list of Workflow Adapters.
6. Select **Workflow Engines** tab.

A list of configured workflow engines appears.



7. Click the **Add** button (green plus symbol) to configure a workflow engine for the adapter.

The **Add Workflow** dialog appears.

8. Enter a name identifying the **Workflow Engine**. Pick an **Adapter Name** from the list of adapters. Enter the **Host, Port, Username, and Password** for the workflow engine.
9. Click **OK**.
The workflow engine is added.
10. Test the workflow engine connectivity using the **Test** button.

Using the BPM Adapter Implementation

Once the workflow adapter is uploaded to the Hub and a workflow engine is configured, it can be used by an ORS. Select the **ORS Workflow Mapping** tab and pick the workflow engine to use for an ORS.

Configuring Merge Task Properties

You can limit the number of records processed for each match table. You can also limit the number of merge tasks created for each match table.

You can add the following properties to the `cmxserver.properties` file to change the default values of the properties:

Property	Description
<code>task.creation.batch.size</code>	Set the maximum number of records to process for each match table for each iteration of the daemon. Default is 50.
<code>task.creation.maximum</code>	Limit the maximum number of tasks that the MDM Hub creates for each match table. If a match table has more merge tasks associated with it than this, then no more merge tasks will be created until the number of tasks associated with records of this match table falls below the specified number. Default is 50.

The `cmxserver.properties` file is located in the following directory:

- In Windows. `<infamdm_install_directory>\hub\server\resources`
- In UNIX. `<infamdm_install_directory>/hub/server/resources`

After you update the `cmxserver.properties` file, you must restart the MDM Hub Server.

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