



**How-to Guide
SAP NetWeaver 7.0**

How To... Use the MDM Java API for MDM SP06 Patch 1

Version 1.10 – March 2008

**Applicable Releases:
SAP NetWeaver '04
SAP NetWeaver 7.0
(MDM Java API SP06 Patch1)
Data Unification
Master Data Management**

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1 Scenario

The MDM Java API enables Java applications to connect to an MDM Server and perform most of the functions available in the MDM Console and MDM Data Manager. The code samples available with this guide focus on the functionality available in the MDM Data Manager. For example: adding, updating, deleting, searching and so on.

2 Introduction

This How To Guide explains how to install, configure and use the MDM Java API Samples Framework to execute various code samples. Each code sample is self contained and is run individually.

3 Prerequisites

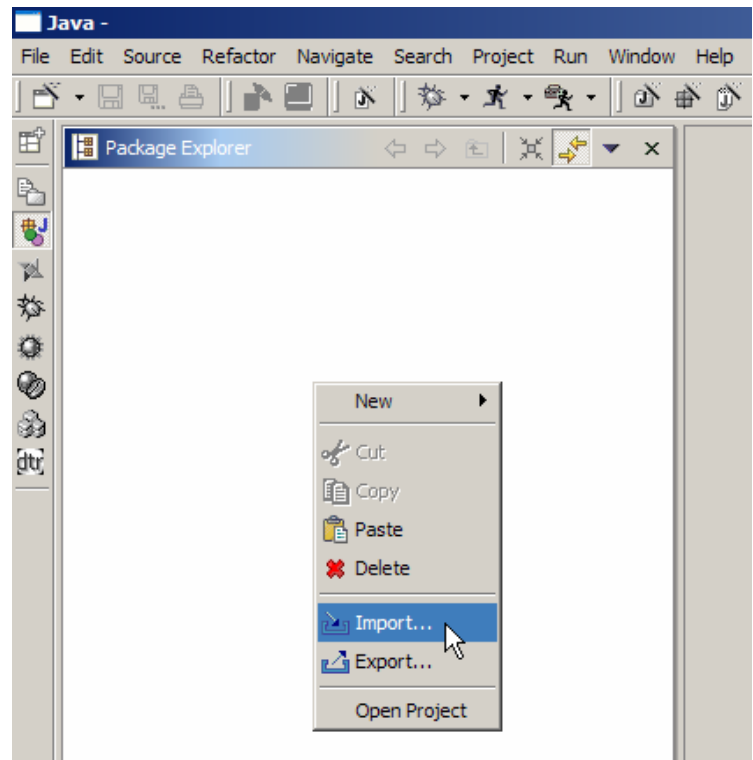
- You have downloaded the following file...
 - [How To Use the MDM Java API for MDM SP6 Patch 1 – Additional Materials.zip](#) file
- The MDM Server is running
- The MDM API Samples repository is loaded
- You have met the prerequisites for the program to be executed, which is defined in the Javadoc of each program

4 The Step By Step Solution

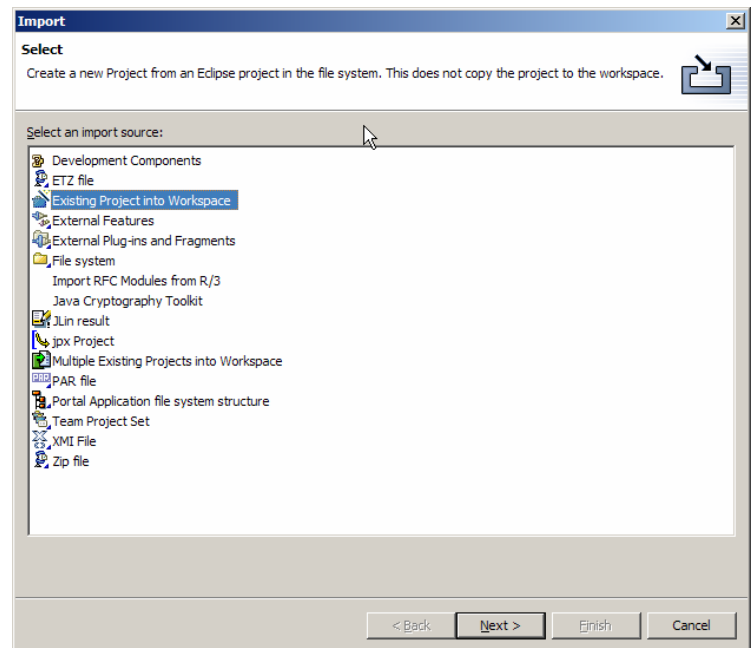
The following steps walk you through the process of configuring the NWDS and executing one of the code samples in the MDM Java API Samples Framework.

1. Unzip the “MDM Java API Samples Framework – SP06.zip” file to an empty temporary directory. Make sure the path information is maintained.
2. Copy the “MDM Java API Samples Framework - 06” directory to your NetWeaver Developer Studio workspace.

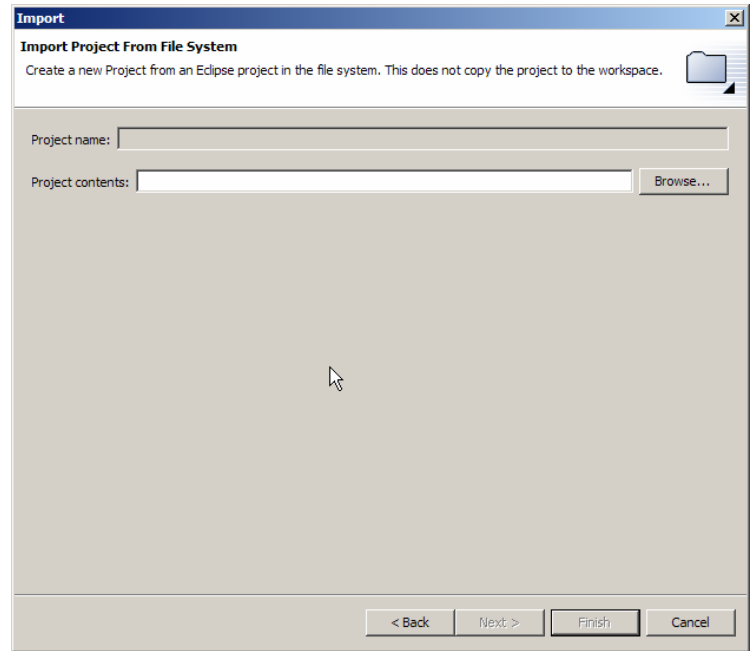
3. From the Package Explorer view in NetWeaver Developer Studio, right-click and select Import...



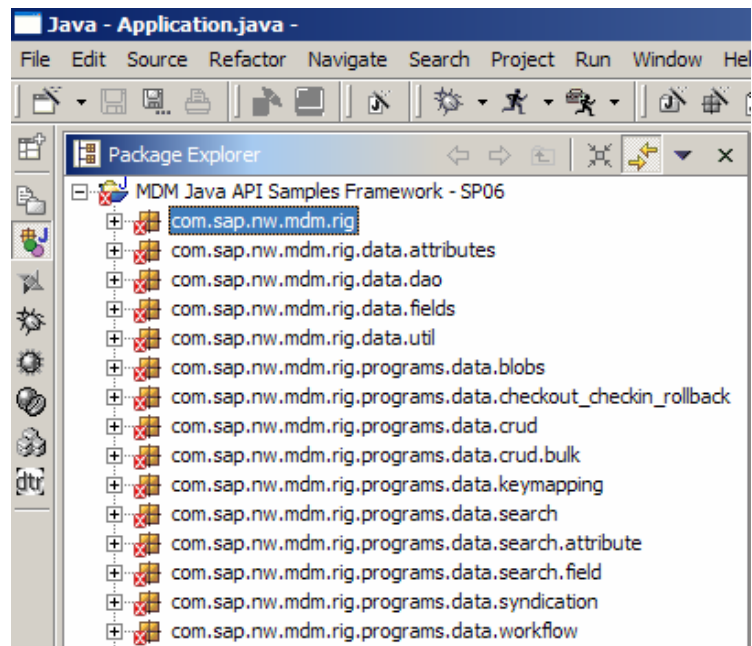
4. Select the Existing Project into Workspace import source and proceed to the next step.



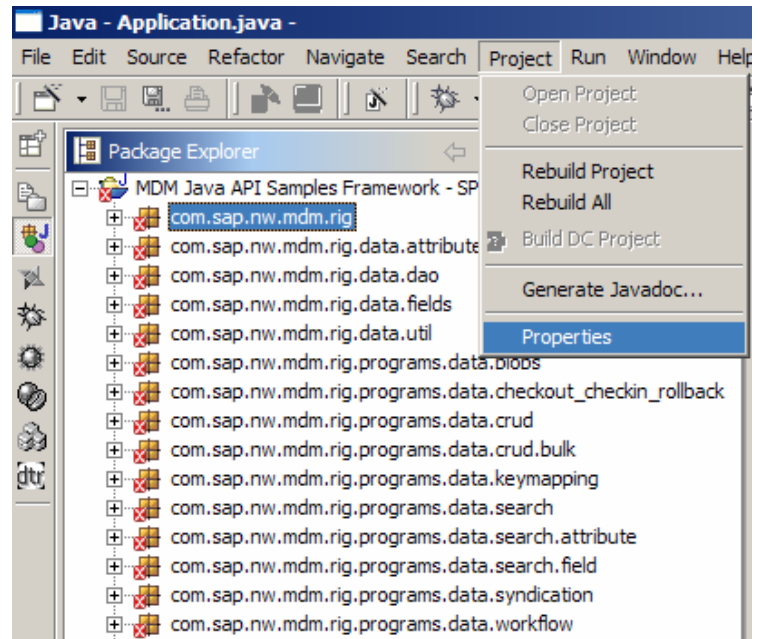
5. Browse your file system and select the “MDM Java API Samples Framework - 06” directory from your workspace directory.



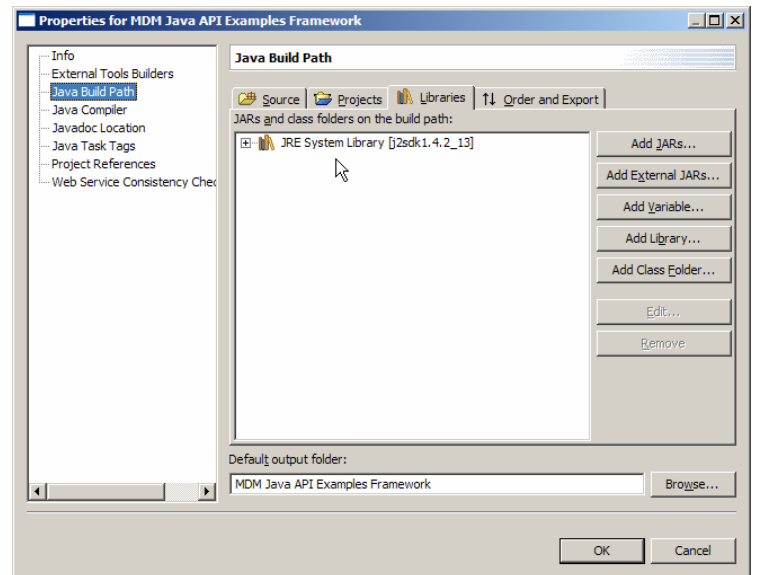
6. Compare the results.



7. Choose the Project -> Properties menu path.



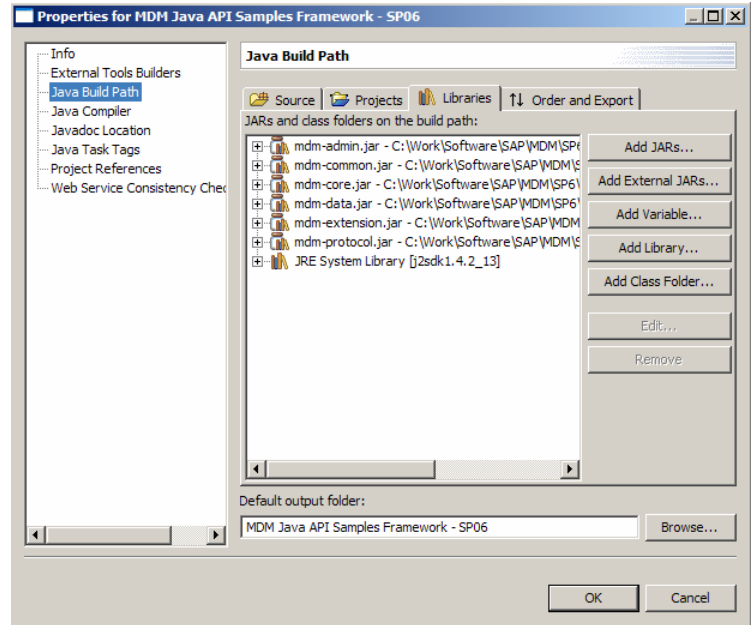
8. Go to the Java Build Path section.



9. Add the following .jar files:

- mdm-admin.jar
- mdm-common.jar
- mdm-core.jar
- mdm-data.jar
- mdm-extension.jar
- mdm-protocol.jar

The six jar files should appear in your Java Build Path as shown in this picture. Please make sure the version is the same as that of the MDM Server, otherwise it will not work.



10. If you don't have the jar files, you can download them from the SAP Service Marketplace <http://service.sap.com/swdc>

- ▼ SAP Software Distribution Center
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The following objects are available for download:

	File Type	Download Object	Title	Patch Level
<input type="checkbox"/>	 ZIP	MDMJ55005P_2-10003460.ZIP	MDM 5.5 SP05 Java API Patch 2 (Build 5.5.42.48)	2
<input type="checkbox"/>	 ZIP	MDMJ55005P2HF_10-10003460.ZIP	MDM 5.5 SP05 Java API Patch 2 Hotfix 10 (Build 5.5.42.85)	10
<input type="checkbox"/>	 ZIP	MDMJ55006P_1-10003460.ZIP	MDM 5.5 SP06 Java API Patch 1	1

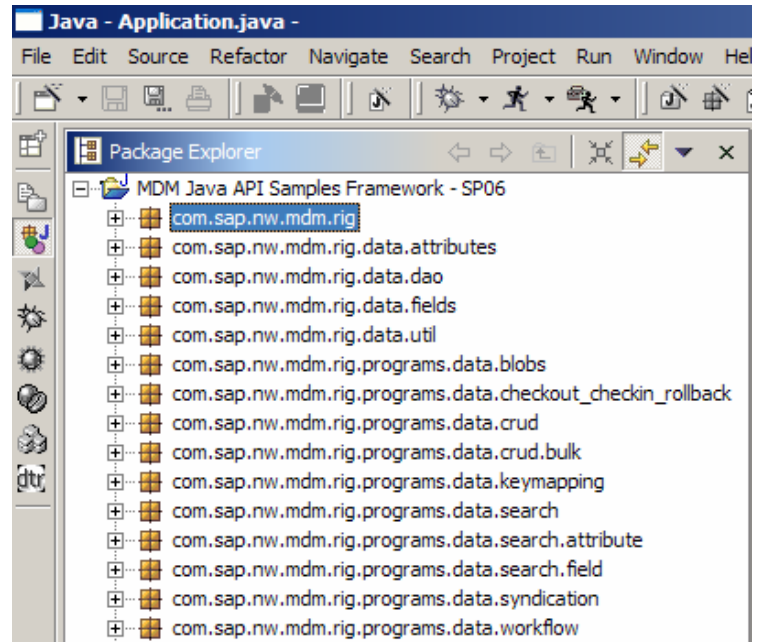
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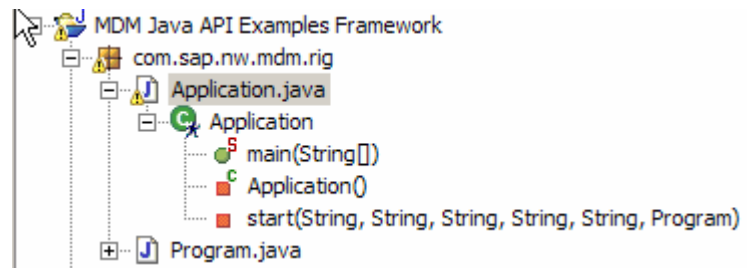
[Select All](#)

[Deselect All](#)

11. Your project should now be error free and ready for you to proceed



12. Open the com.sap.nw.mdm.rig package and open the Application class. This is the class with the static public void main(String[] args) method so this is the starting point.



13. In the Application class, you must do two things

- uncomment one of the lines that start with "program = "
- provide the MDS name

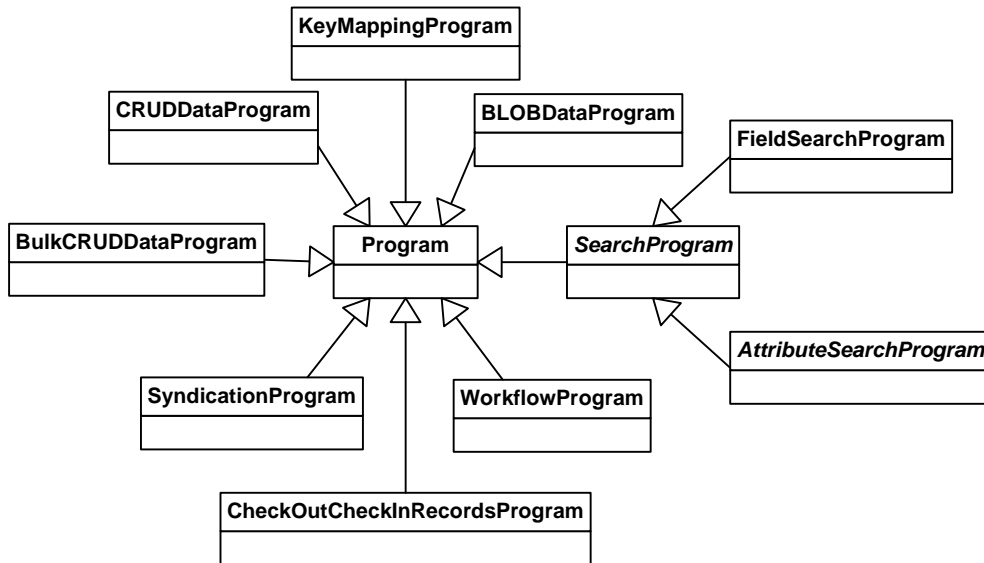
Both of these instructions are found in code comments that start with //TODO. Everywhere you see a commented line that starts with //TODO, please follow those instructions.

14. You are now ready to run the Application class and execute one of the programs. For more information on the programs you can execute, please have a look at the appendix.

5 Appendix

The MDM Java API Samples Framework contains a set of Programs, classes that implement the Program interface either directly or indirectly, that can be executed. These Program classes make use of many other helper classes, but these are not the focus of this guide and are therefore not listed in this guide. For full documentation of all classes, please have a look at the javadoc that is included with the source code.

Below is a diagram of the different kinds of Programs that can be executed.



And here's a listing of all the Programs that can be executed per program type. They are defined as constants (static final variables) in the classes/interfaces depicted in the diagram above. The names of the constants describe what the program will do. For more information, please refer to the javadoc.

BLOB Programs

BLOBDataProgram.INSERT_IMAGE
BLOBDataProgram.RETRIEVE_AND_WRITE_IMAGE_TO_FILE
BLOBDataProgram.RETRIEVE_AND_WRITE_PDF_TO_FILE

Checkout/Checkin Data Programs

CheckOutCheckInRecordsProgram.CHECK_OUT_NEW_CHECK_IN
CheckOutCheckInRecordsProgram.CHECK_OUT_NEW_ROLLBACK
CheckOutCheckInRecordsProgram.CHECK_OUT_EXISTING_CHECK_IN
CheckOutCheckInRecordsProgram.CHECK_OUT_EXISTING_ROLLBACK

Create Read Update Delete (CRUD) Data Programs

CRUDDataProgram.CRUD_HIERARCHY_TABLE
CRUDDataProgram.CRUD_MAIN_TABLE
CRUDDataProgram.CRUD_MAIN_TABLE_WITH_FLAT_AND_HIERARCHY_LOOKUP_FIELDS
CRUDDataProgram.CRUD_MAIN_TABLE_WITH_QUALIFIED_LOOKUP_FIELD
CRUDDataProgram.CRUD_MAIN_TABLE_WITH_TAXONOMY_LOOKUP_FIELD
CRUDDataProgram.CRUD_TAXONOMY_TABLE_WITH_ATTRIBUTES

Bulk Create Read Update Delete (CRUD) data programs
BulkCRUDDataProgram.BULK_CRUD_MAIN_TABLE

KeyMapping Programs

KeyMappingProgram.RETRIEVE
KeyMappingProgram.MODIFY

Search Programs

SearchProgram.DRILL_DOWN_SEARCH
SearchProgram.KEYWORD
SearchProgram.MASK
SearchProgram.NAMED_SEARCH
SearchProgram.QUALIFIER

Attribute Search Programs

AttributeSearchProgram.COUPLED_NUMERIC
AttributeSearchProgram.NUMERIC
AttributeSearchProgram.TEXT

Field Search Programs

FieldSearchProgram.BOOLEAN
FieldSearchProgram.CURRENCY
FieldSearchProgram.LITERAL_DATE
FieldSearchProgram.LOOKUP
FieldSearchProgram.TEXT

Syndication Programs

SyndicationProgram.SYNDICATE_PORT

Workflow Programs

WorkflowProgram.EXECUTE

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