



InformaticaTM

Software Development Kit

Informatica MDM - Product 360

Version: 10.5 HotFix 3 SP 1

Table of Contents

1	SDK Package.....	3
2	Prerequisites	3
2.1	Database.....	3
2.2	Java Development Kit.....	4
2.3	Eclipse.....	4
3	Installation of the SDK Online Help.....	4
4	Installation of the SDK	5
4.1	Install target definition	7
4.1.1	SDK Feature	11
4.2	Install launches and configuration	15
4.2.1	Launch Product 360 Server	17
4.2.2	Launch Product 360 Client	17
4.2.3	Launch Product 360 Repository Manager.....	17
4.2.4	Launch PIM Database Setup	18
4.3	Install examples	18
4.3.1	Examples at a glance	18

The SDK provides documentation on available API's, best practice development infrastructure, ready to use examples for customizing and integration as well as ready to use JUnit test projects



The SDK installation steps for PIM version 10.5.0.01.00 and higher.

1 SDK Package

The SDK zip package has the following structure

Folder	Description
eclipse	Third-party eclipse plugins and external development tools
example	Example projects (customizing template projects, testing examples, PDE build examples, export templates, web access, etc)
preferences	Eclipse IDE preferences
projects	Example Eclipse project with configuration files required to start HPM server and client in development environment
targets	Product 360 runtime, javadoc, development tools and frameworks

2 Prerequisites

2.1 Database

An available database server with the corresponding Product 360 schemas needs to be installed and configured to be accessible from the development machine. Refer to the installation manual for details

2.2 Java Development Kit

A Java Development Kit Version 17 in 64bit must be available on the machine to run the eclipse distribution. Due to licensing limitations the SDK package is delivered without a JDK. However, usually it's enough to just use the most recent 17 JDK available.

<https://www.azul.com/downloads/zulu-community/?version=java-17-lts&os=windows&architecture=x86-64-bit&package=jdk>

2.3 Eclipse

You need to have Eclipse as your IDE, others will not work. The minimum required version is the Eclipse IDE 4.25.0(2022-09).

In all cases, we recommend to use the "*Eclipse for RCP and RAP Developers*" edition.

Eclipse 2022-09

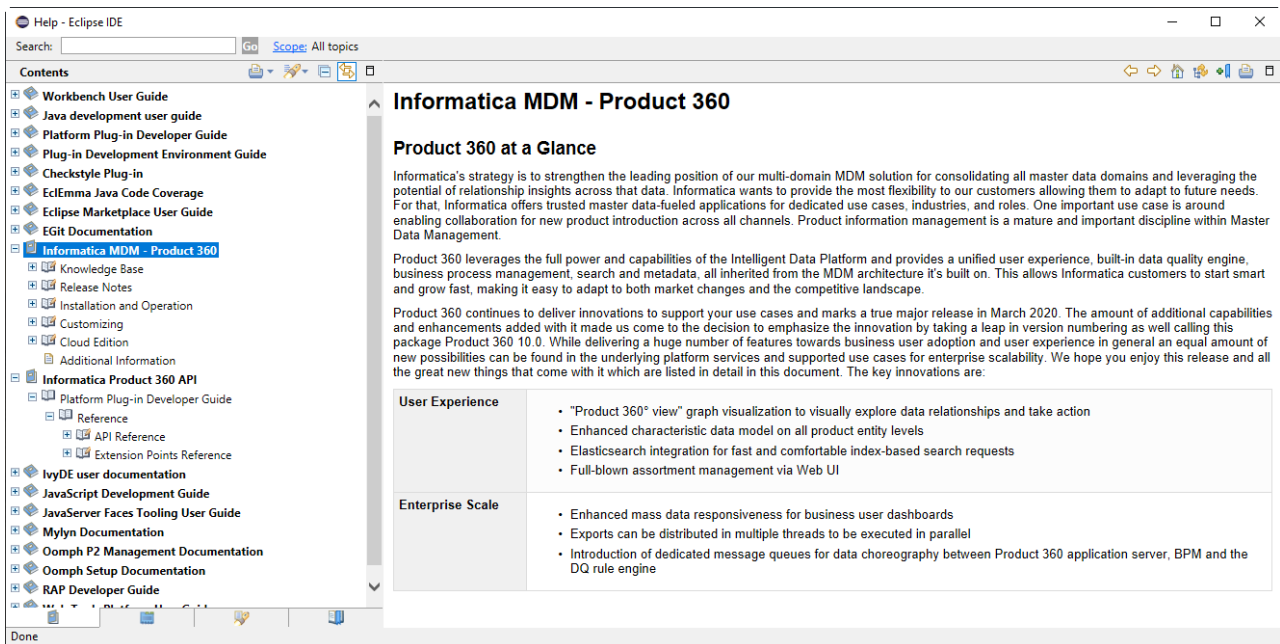
<https://www.eclipse.org/downloads/packages/release/2022-09/r/eclipse-ide-rcp-and-rap-developers>

3 Installation of the SDK Online Help

The SDK online help contains the javadoc for the API, the list of available extension points as well as the general knowledge base and technical development articles. After installation it is accessible within Eclipse via Help -> Help Contents.

- Unzip the SDK distribution to an arbitrary place on your hard drive. In this example we use, C:\Informatica\PIM-SDK.
- Copy all plugins from the C:\Informatica\PIM-SDK\eclipse\sdkdoc\plugins folder to the dropins\plugins folder of your eclipse installation (you may have to create the plugins subfolder before)
- Generate jar com.heiler.sdk.help.wiki_<version>.jar from knowledge base page and place that in dropins\plugins folder of your eclipse installation.
- Restart Eclipse

If you now open Help Contents inside of eclipse, you should see two sections named "Informatica Product 360" and "Informatica Product 360 API" as shown on this picture.



4 Installation of the SDK

- Run eclipse and choose an arbitrary workspace for the project you want to build.

For convenience the SDK has a built-in project structure which you might find useful. We use `C:`

`\Informatica\PIM-SDK\projects\HENRI\workspace` as the development workspace location for our "HENRI" project.



A good advice is to use workspace paths as short as possible. Otherwise this may lead to Data Quality related problems during server start or during Data Quality execution that some plugins or other objects cannot be found.

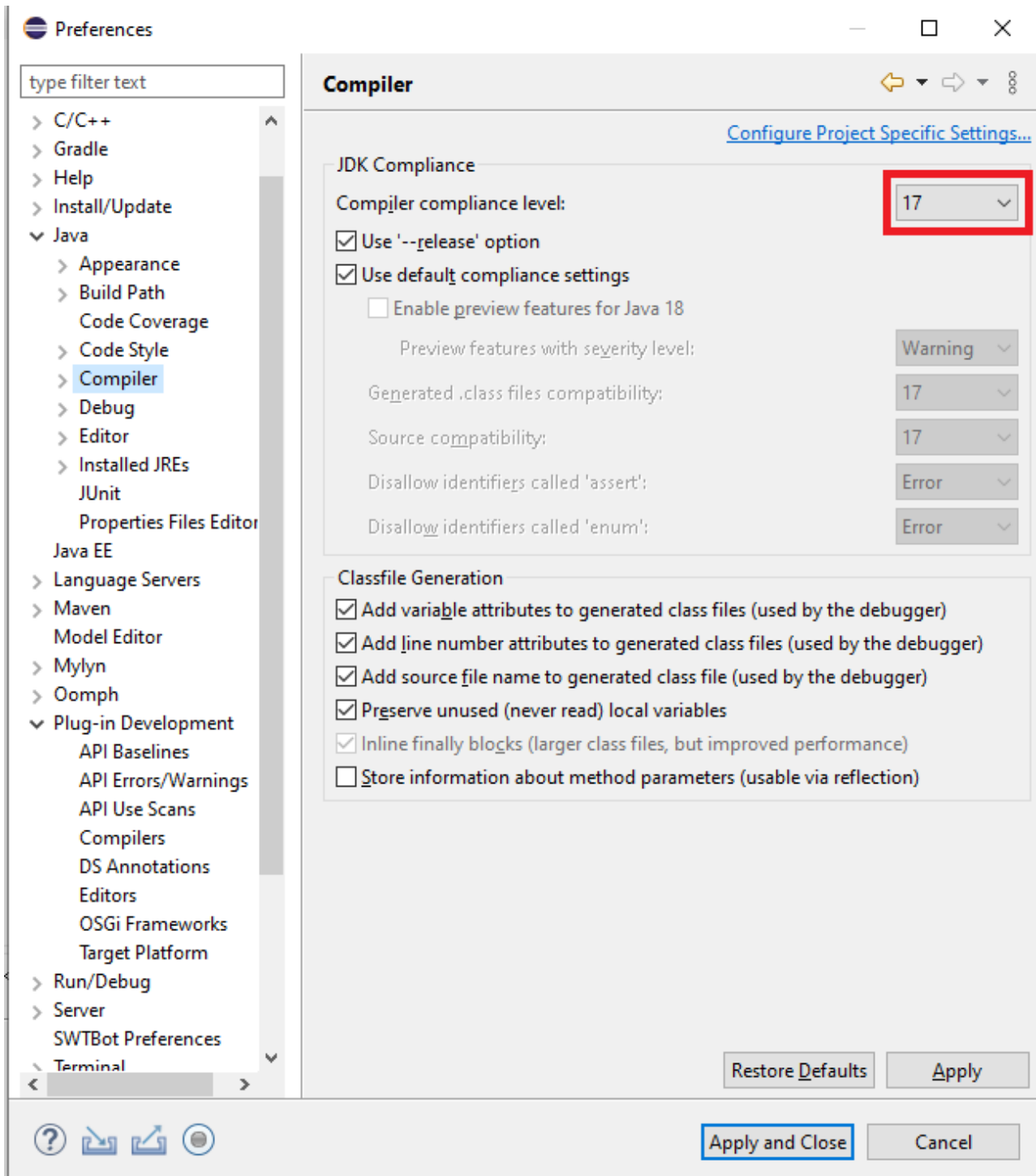
- (optional) Install 3rd party plugins from `C:\Informatica\PIM-SDK\eclipse\3rdparty`.
 - We recommend to install the Resource Bundle Editor plugin which makes it very easy to edit resource property files like the i18n files needed for multi-language support. This editor can be found on the Eclipse marketplace: <http://marketplace.eclipse.org/content/resourcebundle-editor>
- Go to **File > Import > Preferences** and import the `Eclipse_4.4_Preferences.epf` preferences into your workspace. This preference file is located in the `C:\Informatica\PIM-SDK\preferences` folder. Preferences contain Java formatter settings which satisfy the Informatica standard coding conventions.



We suggest to use the provided development preferences, but you can also use your own conventions. In any case, we strongly recommend that the whole team uses the same conventions unless that you will have lots of "merge conflicts" with your source code management system.

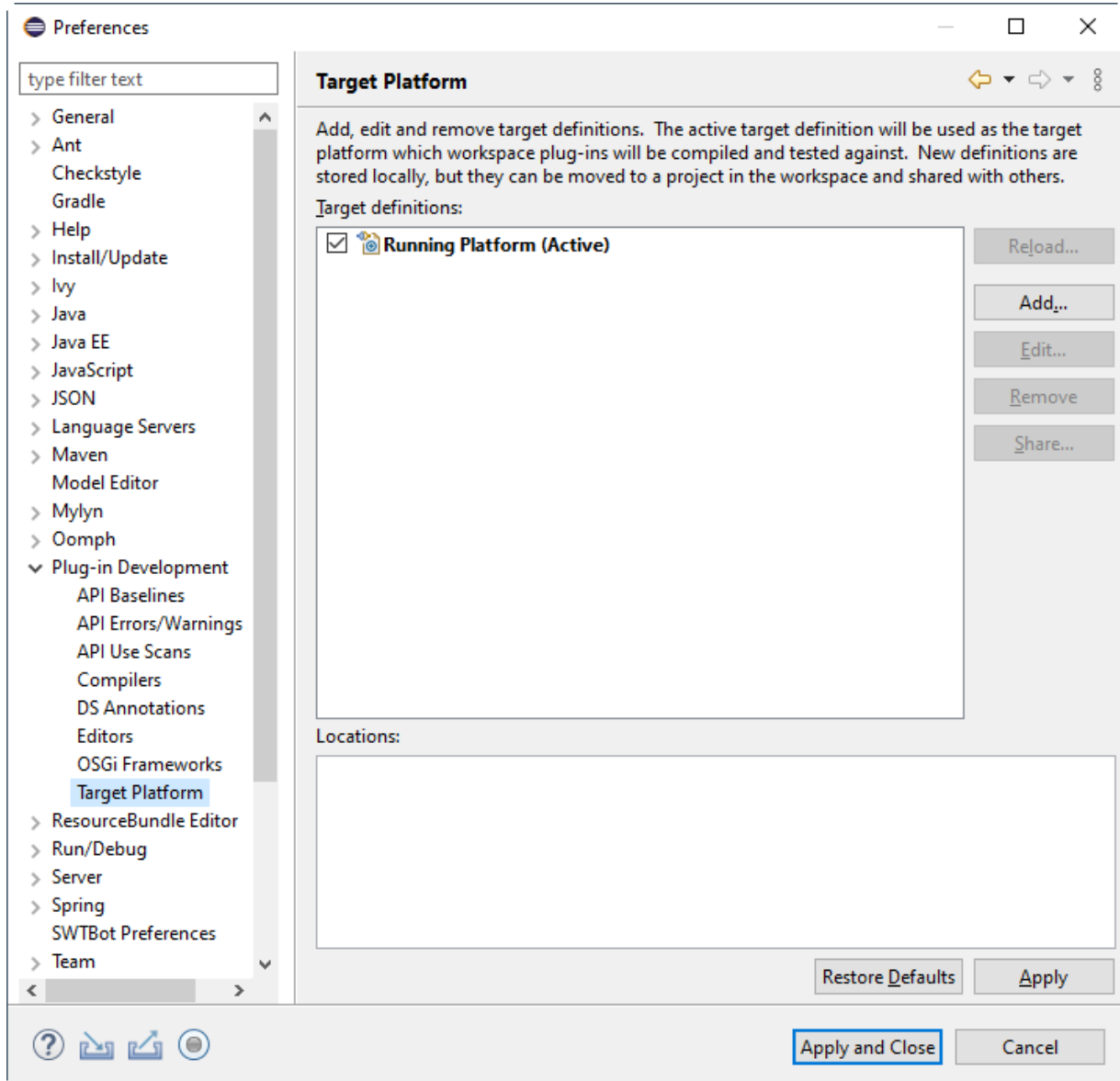
- Add the 17 JDK 64bit to the workspace, if not already done.
 - Open **Window > Preferences > Java > Installed JREs**

- Add the JDK 17 to the list of available JREs and set the JRE instance name, for example `jdk17`.
Make sure to use a JDK. By this means you have the Java source code available.
- Set the installed JRE to "default" (check the checkbox).
- Check the Java compiler settings. Open **Window > Preferences > Java > Compiler** and make sure that the default compliance level is 17.



4.1 Install target definition

- Open **Window > Preferences > Plug-in Development > Target Platform**.



- Create new target definition: **Add > Start with empty target definition**. Set name to "Product 360 Target 64Bit"
- Open environment tab and set Target Environment.
 - *Operating System: win32, Windowing System: win32, Architecture: x86_64.*

Edit Target Definition

Target Content
Edit the name, description, and plug-ins contained in a target.

Name: Product 360 Target 64Bit

Locations Content Environment Arguments Implicit Dependencies

Target Environment
Specify the target environment. If left blank, the default environment variables from the host (running) platform will be used.

Operating system: win32

Windowing System: win32

Architecture: x86_64

Locale:

Java Runtime Environment
Specify the JRE or execution environment for this target. Selecting a named JRE will change the workspace default JRE setting.

☒ Default JRE

☐ JRE name: zulu17.36.13-ca-jdk17.0.4-win_x64

☐ Execution Environment: CDC-1.0/Foundation-1.0

Finish Cancel

- Add new Software Site location: **Locations > Add > Software Site**
- Add new local software site: **Add > Local...** Select `C:\Informatica\PIM-SDK\targets\10.5.0.01.00\` folder and click **ok**.

Add Content

Add Software Site

Select content from a software site to be added to your target

Work with:
type or select a site
Add...
Manage...

type filter text

Name	Version
<input type="checkbox"/> ⓘ There is no site selected.	

Add Repository

Name:
Product 360 v.10.5.0.01.00 SDK
Local...

Location:
file:/C:/Informatica/PIM-SDK/targets/10.5.0.01.00
Archive...

OK

?
Add
Cancel

Select All

Details

☒ Group by Category
☒ Show only the latest version

Included Software

By default, all required software is added to the target based on its environment settings. Turning this option off allows software to be added with missing requirements and multiple environments. This setting applies to the entire target definition.

☒ Include required software

☐ Include all environments

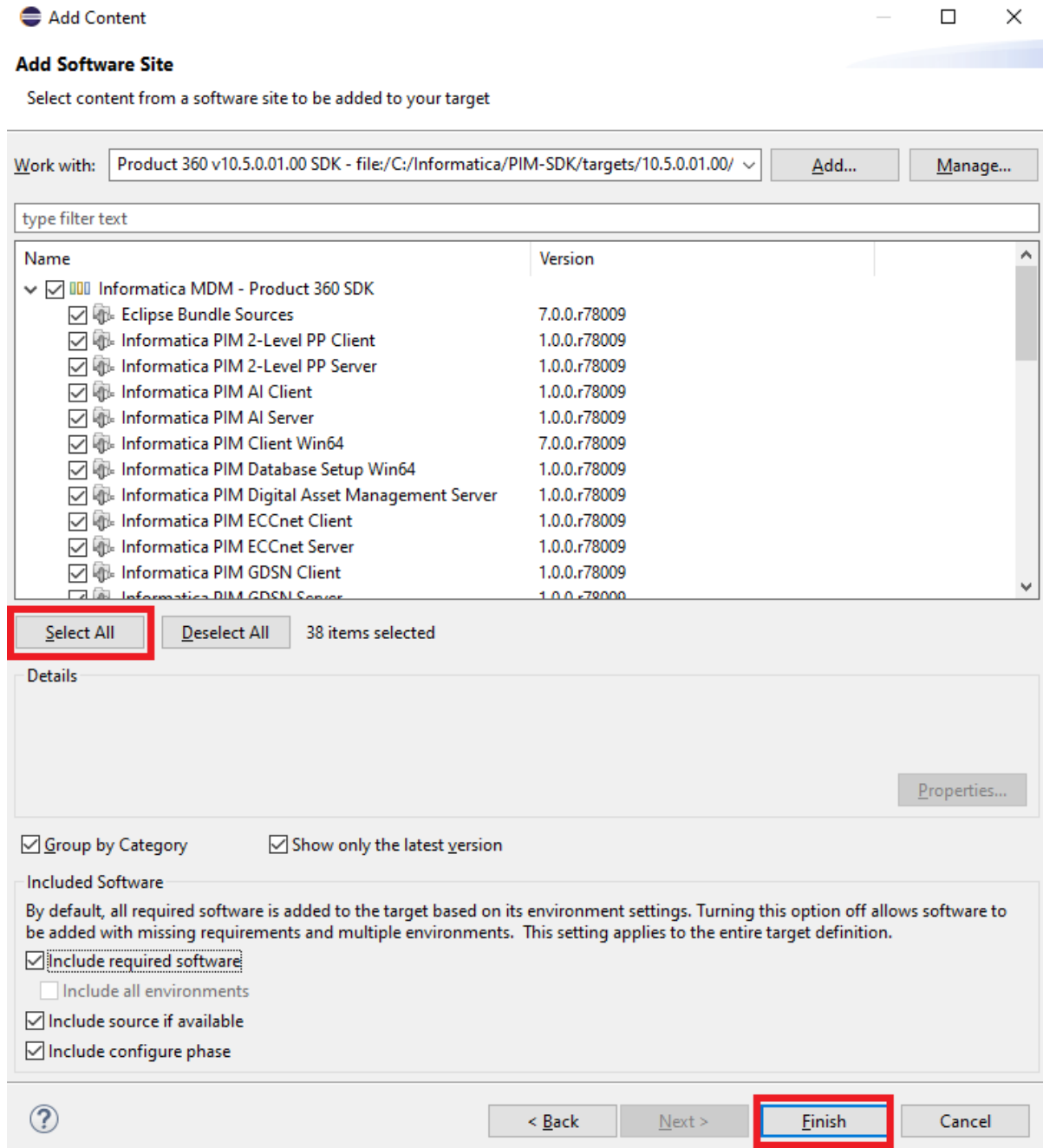
☒ Include source if available

☒ Include configure phase

?

< Back
Next >
Finish
Cancel

- Now you will see a list of available features in the SDK including all 3rd Party and Eclipse features:



4.1.1 SDK Feature

SDK Feature	Description
Eclipse Bundle Source	Sources of important Eclipse Bundles (e.g. org.eclipse.runtime.core)
Informatica PIM Repository Editor Win64	Repository editor (Windows 64bit platform)
Informatica PIM Database Setup Win64	Database Setup (Windows 64bit platform)
Informatica PIM Server Runtime	Server runtime
Informatica PIM Server Win64 Support	Windows 64 platform server specific bundles (GraphicsMagick, eclipse launcher, etc)
Informatica PIM Rich Client	Runtime of Product 360 Desktop Client
Informatica PIM Client Win64	Windows 64 platform Desktop client specific bundles
Informatica PIM Web Client	Web Access components that are needed when starting the Product 360 Desktop Client (Web Action Rights)
Informatica PIM Web Server	Web Access runtime for the Product 360 Server.
Informatica PIM 2-Level PP Client	Add-On to Desktop Client for 2-tier Product Paradigm.
Informatica PIM 2-Level PP Server	Add-On to Product 360 Server for 2-tier Product Paradigm.
Informatica PIM Web 2-Level PP Server	Web Access runtime for the Product 360 Server for 2-tier Product Paradigm.

SDK Feature	Description
Informatica PIM Variant Client	Add-On to Desktop Client for 3-tier Product Paradigm.
Informatica PIM Variant Server	Add-On to Product 360 Server for 3-tier Product Paradigm.
Informatica PIM Web Variant Server	Web Access runtime for the Product 360 Server for 3-tier Product Paradigm.
Informatica PIM GDSN Client	Add-On to Desktop Client for the GDSN Accelerator
Informatica PIM GDSN Server	Add-On to Product 360 Server for the GDSN Accelerator
Informatica PIM Web GDSN	Web Access runtime for the GDSN Accelerator
Informatica PIM Digital Asset Management Server	This feature contains the plugin(s) that are needed to use Digital Asset Management system
Informatica PIM Supplier Exchange REST Interface	This feature contains the plugin(s) for the use of PIM Supplier Portal system
Informatica PIM Supplier Exchange Client	This feature contains the plugin(s) for the use of PIM Supplier Portal system specific actions in the rich client
Informatica PIM Websphere Client	This feature contains the plugin(s) for the use of IBM Websphere specific actions in the Product 360 Desktop Client
Informatica PIM Websphere Client I18N	This feature contains the language plugin(s) for the use of IBM Websphere specific actions in the Product 360 Desktop Client

SDK Feature	Description
Informatica PIM Websphere Server	This feature contains the plugin(s) that are needed to use IBM Websphere integration in the Product 360 Server
Informatica PIM Websphere Server I18N	This feature contains the language plugin(s) that are needed to use IBM Websphere integration in the Product 360 Server
Informatica PIM SDK Javadoc	Contains the javadoc for the server and client binaries.
Informatica PIM Web SDK Javadoc	Contains the javadoc for the Web Access binaries.
Informatica PIM Testing Framework	Testing framework including junit, mockito and eclipse testing framework
Informatica PIM Tooling Client/Server	Runtime Tools (Command Inspector, Eclipse Plugin Spy and others)
Informatica PIM ECCnet Client	Add-On to Desktop Client for the ECCnet Accelerator. (Not a standard feature)
Informatica PIM ECCnet Server	Add-On to Product 360 Server for the ECCnet Accelerator. (Not a standard feature)
Informatica PIM Web ECCnet	Web Access runtime for the ECCnet Accelerator (Not a standard feature)
Informatica PIM AI Client	Add-On to Desktop Client for the CLAIRE Accelerator. (Not a standard feature)
Informatica PIM AI Server	Add-On to Product 360 Server for the CLAIRE Accelerator. (Not a standard feature)

SDK Feature	Description
Informatica PIM Web AI	Web Access runtime for the CLAIRE Accelerator (Not a standard feature)

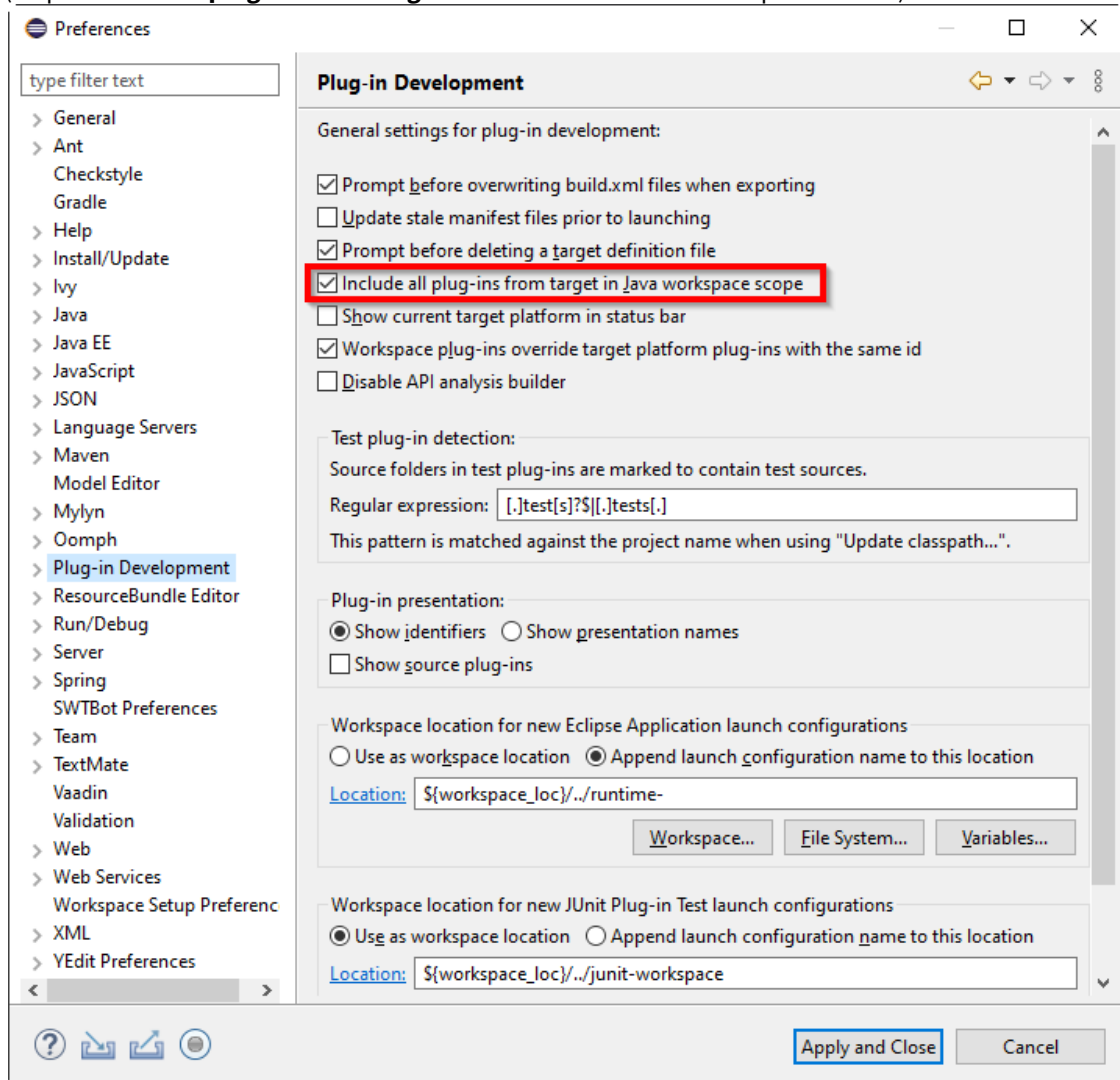
Select at least

- *'Informatica PIM Rich Client'*,
- *'Informatica PIM Client Win64'*,
- *'Informatica PIM Repository Editor Win64'*,
- *'Informatica PIM Server Runtime'*,
- *Informatica PIM Server Win64 Support'*.

For full-fledged development you will need all features. It is recommended to have all the features selected.

- Click **Select All** to select all the features.
- Click **Finish** and select 'Product 360 Target 64Bit' as default target platform.
- Add target platform bundles to java search. **Window > Show View > Plug-in development > Plug-ins**.
 - In the Plug-ins view toolbar click on '**Add All Plug-ins to Java Search**'.

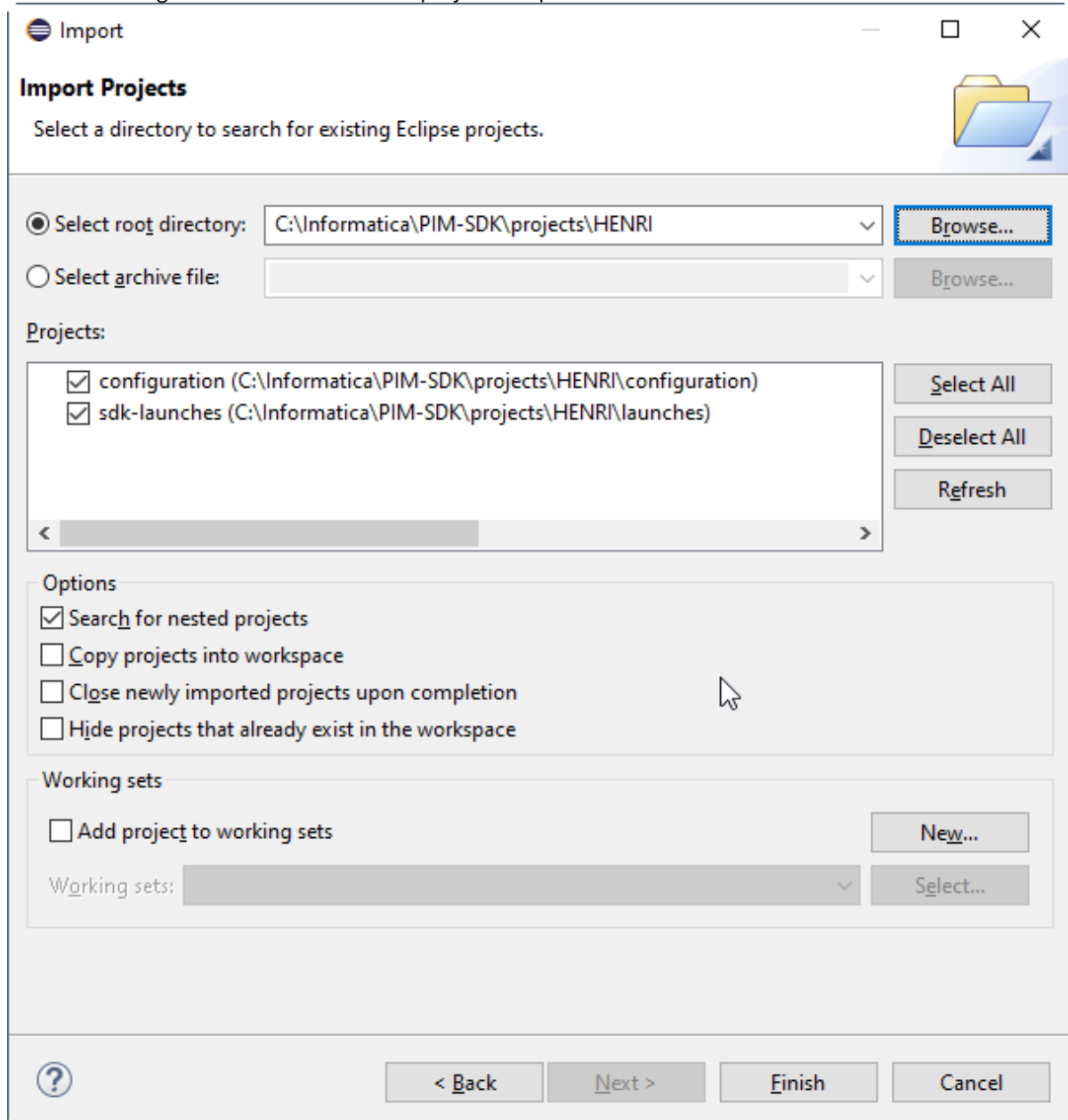
- You can also check the preference '**Include all plug-ins from target in Java workspace scope**' (resp. '**Include all plug-ins from target in Java search**' in older Eclipse versions)



4.2 Install launches and configuration

- Import the launch and configuration projects into your workspace.
- Open **File > Import > Existing Projects into Workspace**.
- Select the `C:\Informatica\PIM-SDK\projects\HENRI` directory for the root directory.

- Check the configuration and the launches project and press **finish**



- Configure the configuration settings of your project. In the configuration project in your workspace you will find two sub folders, client and server. The client folder holds all configuration files for the client start, usually you do not need to modify anything here. The server folder contains all required configuration files for the server start. At least the `server.properties` file needs to be configured. In the server folder you will find several `server.properties` templates (one per supported database). There are a few properties that must be set in order to start the server: See the corresponding section in the PIM Core Installation Manual for details on this configuration.

Example: server properties

```

filestorage.dir.shared      = C:/Informatica/PIM-SDK/projects/HENRI/runtime
license.customer.file.local = ${filestorage.dir.shared}/license/
<YourLicenseFile.license>
license.customer.key       = <CustomerKey>
db.default.server         = localhost
db.default.dir            = C:/Informatica/PIM-SDK/projects/HENRI/runtime/database
db.default.schema.suffix  = _SDK105

```



Before setting up your SDK environment you can set up a standalone Product 360 runtime system for your project, you will need the development database anyway. After this you can use the configuration files from this working system and copy them to the configuration/client and configuration/server directory.



For setting up your SDK environment you need a "Informatica Product 360 v10.5" license. Consulting and external implementation partners can request this license from the support department.

- Copy your license file to the directory `C:/Informatica/PIM-SDK/projects/HENRI/runtime/license`

4.2.1 Launch Product 360 Server

- Go to **Run > Run Configurations > Eclipse Application > Informatica MDM - Product 360 Server**.
- (Optional) To run P360 with Informatica Media Manager, select '*com.heiler.ppm.feature.opasg.server*' as feature to launch with, too.
- Press run.

4.2.2 Launch Product 360 Client

- Go to **Run > Run Configurations > Eclipse Application > Informatica MDM - Product 360 Desktop Client**.
- Press run.
- Enter default credentials in the authentication dialog (Username: `Administrator`, Password: `Administrator`).
- Launch Web Access
 - Open your browser and enter the following url: `http://localhost:1512/pim` (replace *localhost* with the *dest.host* from *server.properties* if configured)
- Congratulations, you're ready to start developing with Informatica MDM - Product 360!

4.2.3 Launch Product 360 Repository Manager

- Go to **Run > Run Configurations > Eclipse Application > Informatica MDM - Product 360 Repository Manager**.

- Press run.

4.2.4 Launch PIM Database Setup

- Go to **Run > Run Configurations > Eclipse Application > Informatica MDM - Product 360 Database Setup**.
- Press run.
- For further steps to work with Database setup see: Server Database

4.3 Install examples

- Open **File > Import > Existing Projects into Workspace**.
- Select the `C:\Informatica\PIM-SDK\examples` directory for the root directory.
- Check all example projects, but the `customizing.build` and press **finish**

4.3.1 Examples at a glance

Project	Description
com.heiler.ppm.custom.rest	Examples for own rest based services. Contains a running example for a rest service which is able to return some item data based on EAN numbers
com.heiler.ppm.customizing.activities	Examples how to disable UI contributions (like views, menu items etc.) using "Eclipse activities"
com.heiler.ppm.customizing.article.ui.contributionclass	Example how to replace a standard view (like "Items #1") with a custom view using the extension point <code>contributionClassProviders</code>
com.heiler.ppm.customizing.article.ui.searchView	Example how to customize the standard "Search view" using the extension point <code>searchViewAdditions</code>
com.heiler.ppm.customizing.ckeditor	Examples how to customize the standard RichText-Editor using extension points <code>ckeditorConfiguration</code> , <code>richTextValidators</code> and <code>richTextMarkupConversionExtensions</code>

Project	Description
om.heiler.ppm.customizing.core	Core functionality of your own customizing, is empty by default. Use it as a template for your own customizing code
com.heiler.ppm.customizing.core_test	Test bundle for unit and integration tests. Contains an example for a unit test (<code>CustomizingUnitTest</code>) as well as for an integration test (<code>CustomizingIntegrationTest</code>). Additionally to that it contains working launch configurations for the given test suites. One for integration and one for unit tests. Use this bundle to implement your own tests for your customizing business code.
com.heiler.ppm.customizing.export.core	Examples for implementation of own export data providers, data types and export functions
com.heiler.ppm.customizing.export.core.test	Examples for writing tests for own export functionality
com.heiler.ppm.customizing.server	Server functionality of your own customizing, is empty by default. Use it as a template for your own customizing code
com.heiler.ppm.customizing.spelling.ui	Example how to use the <code>SpellCheckingAPI</code> to spellcheck the whole catalog in a mass-operation
com.heiler.ppm.customizing.ui	UI functionality of your own customizing, is empty by default. Use it as a template for your own customizing code
com.heiler.ppm.feature.customizing.*	Features for the client, server and tests (<code>JUnit</code>), used for the launch configurations and automatic builds. Add your own customizing plugins to these features
com.heiler.ppm.web.custom.theme	Sample project that demonstrates how to contribute a custom theme for WebAccess. Put your additional style definitions into the <code>styles.css</code> file.

Project	Description
com.heiler.ppm.web.custom.app	Sample project with some basic programmatic extensions of the PIM Web UI.
com.heiler.ppm.web.vaadin.sample	Sample web project that shows how to integrate a all new web interface by leveraging the PIM stack and the Vaadin framework.
customizing.build	Ready to use ant targets to build your customizing bundles and tests in an integrated and automated build system. Based on Eclipse p2 build infrastructure.

Copyright

© Copyright Informatica LLC 1993, 2024

This software and documentation are provided only under a separate license agreement containing restrictions on use and disclosure. No part of this document may be reproduced or transmitted in any form, by any means (electronic, photocopying, recording or otherwise) without prior consent of Informatica LLC.

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation is subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License.

Informatica and the Informatica logo are trademarks or registered trademarks of Informatica LLC in the United States and many jurisdictions throughout the world. A current list of Informatica trademarks is available on the web at <https://www.informatica.com/trademarks.html>. Other company and product names may be trade names or trademarks of their respective owners.

The information in this documentation is subject to change without notice. If you find any problems in this documentation, report them to us at infa_documentation@informatica.com.

Informatica products are warranted according to the terms and conditions of the agreements under which they are provided. INFORMATICA PROVIDES THE INFORMATION IN THIS DOCUMENT "AS IS" WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT.