**Prescription Monitoring Program  
Information Exchange Service**

**Java Apache Axis2 PMIX Reference Implementation**

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# Introduction

This Java reference implementation for the Prescription Monitoring Program Information Exchange service (PMIX) is built to conform to the JAX-WS standard and uses the Apache Axis2 implementation for Java running under Apache Tomcat. It has been built using Eclipse IDE for Java EE developers. This implementation adheres to the following standards:-

* Eclipse Helios or Indigo
* Axis2 version – 1.5.4
* Tomcat v7.0
* JAX WS version – 2.0
* JDK 1.6

# Prerequisites

The projects in the *PMIX Reference Implementation* folder can be imported into a workspace in Eclipse.

* The version of Eclipse being used should support the Web Tools Platform (WTP) (Eclipse Helios or Indigo). The Helios version can be found here:- <http://www.eclipse.org/downloads/download.php?file=/technology/epp/downloads/release/helios/SR2/eclipse-jee-helios-SR2-win32.zip&url=http://www.gtlib.gatech.edu/pub/eclipse/technology/epp/downloads/release/helios/SR2/eclipse-jee-helios-SR2-win32.zip&mirror_id=337>
* The Axis2 server (version 1.5.4) must be installed (with the Axis2 home directory correctly configured in Preferences). The correct version can be found here - <http://archive.apache.org/dist/axis/axis2/java/core/1.5.4/axis2-1.5.4-bin.zip>
* Tomcat server (version 7) must be installed with the HTTP port set to 18801 and the path set to “/2010/12/pmix” in the server.xml file (in Servers folder in the workspace).
* It can be downloaded here:- <http://apache.cs.utah.edu/tomcat/tomcat-7/v7.0.19/bin/apache-tomcat-7.0.19.zip>

# Setting up the Eclipse workspace:-

1. Import all the projects into a workspace in Eclipse.
2. In the axis2 installation directory on your machine, copy the folder called ‘lib’.
3. Paste 'lib' in the WebContent -> WEB-INF folder in the following projects.
   1. PMP Client
   2. PMP Client Application
   3. PMP Service

# Running the server

1. Run the *PMP Service* project “on Server” in Tomcat.

# Running the client

1. Download the following JARs and add them to the build path of *PMP Client Application*:-
   1. Apache Commons Collections: <http://apache.opensourceresources.org/commons/collections/binaries/commons-collections-3.2.1-bin.zip>
   2. Apache Commons Lang: <http://apache.mirrors.airband.net/commons/configuration/binaries/commons-configuration-1.6.zip>
   3. Apache Commons Configurations: <http://mirror.nyi.net/apache/commons/lang/binaries/commons-lang-2.6-bin.zip>
2. The service endpoint address can be changed in the “address” parameter in the client.properties file.
3. Right click on ClientUI.java in the src folder and *Run as a Java Application.*
4. Enter sample information and click on Provide or Receive to send a synchronous message.