

Development in IntelliJ IDEA

The preconfigured IntelliJ IDEA project with modules for two sample plugins and a [batch mode](#) (command-line) tool is provided with a program installation directory. The project can be found in `<modeling tool installation directory>/openapi/ide/intellij.zip`.

Let's use MagicDraw as an example to describe the following procedures.

To setup the IntelliJ IDEA environment for the MagicDraw (or other program according to a modeling tool you are using) development

1. In IntelliJ IDEA, add a path variable named `MAGIC_DRAW_INSTALL_DIRECTORY` and pointing to your version of MagicDraw (CSM, CEA that you have the licence for, as it starts like a normal version and will require an activated licence) installation directory.
2. Extract `<MagicDraw installation directory>/openapi/ide/intellij.zip` to a chosen directory .
3. Open the extracted IntelliJ IDEA project `MagicDraw development.ipr` from that directory .



The launch configuration is designed to load plugins from the program installation directory (see step #1) and two plugins from the IDEA project. Thus, if the `md.plugins.dir` java system property is not defined (see [Plugins directories](#)), developing plugins are not loaded.

After projects are imported and the launch configurations are prepared, the IDEA project are ready for the source code development and running /debugging.



The libraries (jar files) of the plugin must be added to the development class path throughout the plugin dependency hierarchy if the developing code depends on that plugin.
For example, if the code depends on plugin A; plugin A depends on plugins B and C; plugin B depends on plugin D, the libraries of all plugins (A, B, C, and D) must be added to the class path.
For more information, see the [Identifying plugin dependencies](#) page.



When you launch your own plugin, you need to add all jar files that are required by your plugin from appropriate plugins. The MagicDraw jar files can be found in `MAGIC_DRAW_INSTALL_DIRECTORY/lib` and its sub directories, whereas plugins' jar files can be found in `MAGIC_DRAW_INSTALL_DIRECTORY/plugins` and its sub directories.



Even if the plugin descriptor file contains information about a runtime plugin `.jar` file, it is not necessary to build and deploy this `.jar` file to a plugin directory while a plugin is developed under IntelliJ IDEA.