

# Project

---

Whatever you do in IntelliJ IDEA, you do that in the context of a project. A project is an organizational unit that represents a complete software solution.

Your finished product may be decomposed into a series of discrete, isolated modules, but it's a project definition that brings them together and ties them into a greater whole.

Projects don't themselves contain development artifacts such as source code, build scripts, or documentation. They are the highest level of organization in the IDE, and they define [project-wide settings](#) as well as collections of what IntelliJ IDEA refers to as [modules](#) and [libraries](#).

On this page:

- [Project format and files](#)
- [Directory-based format](#)
- [File-based format](#)

## Project format and files

IntelliJ IDEA stores the configuration data for projects and their components in plain text XML files making it easy to manage and share project configuration data with others.

Two formats are available for storing the project configuration data: [directory-based](#) and [file-based](#).

### Directory-based format

When the directory-based format is used, there is a `.idea` directory in the project directory.

The `.idea` directory contains a set of configuration files (`.xml`). Each file contains only a portion of configuration data pertaining to a certain functional area which is reflected in the name of a file, for example, `compiler.xml`, `encodings.xml`, `modules.xml`.

Almost all of the files contain information core to the project itself, such as names and locations of its component modules, compiler settings, etc. Thus, these files may (and should) be kept under version control.

The exception is the file `workspace.xml`. It stores your personal settings such as placement and positions of your windows, your VCS and History settings, and other data pertaining to the development environment. So it's unlikely that you'd want to share this file with your colleagues.

### File-based format

If the file-based format is used, there are two configuration files in the project directory. One of the files has the `.ipr` extension and stores the core project information. The other file has the `.iws` extension and stores your personal workspace settings.

The `.iws` file shouldn't be placed under version control while the `.ipr` file should.

The file-based format can be converted into the directory-based, see [Converting Projects Into Directory-Based Format](#).

## See Also

Procedures:

- [Creating Projects](#)
- [Configuring Project Settings](#)
- [Configuring Project Structure](#)

Reference:

- [Project and IDE Settings](#)
- [Synchronizing and Sharing Settings](#)
- [Directories Used by IntelliJ IDEA to Store Settings, Caches, Plugins and Logs](#)

**Web Resources:**

- [Developer Community](#) 