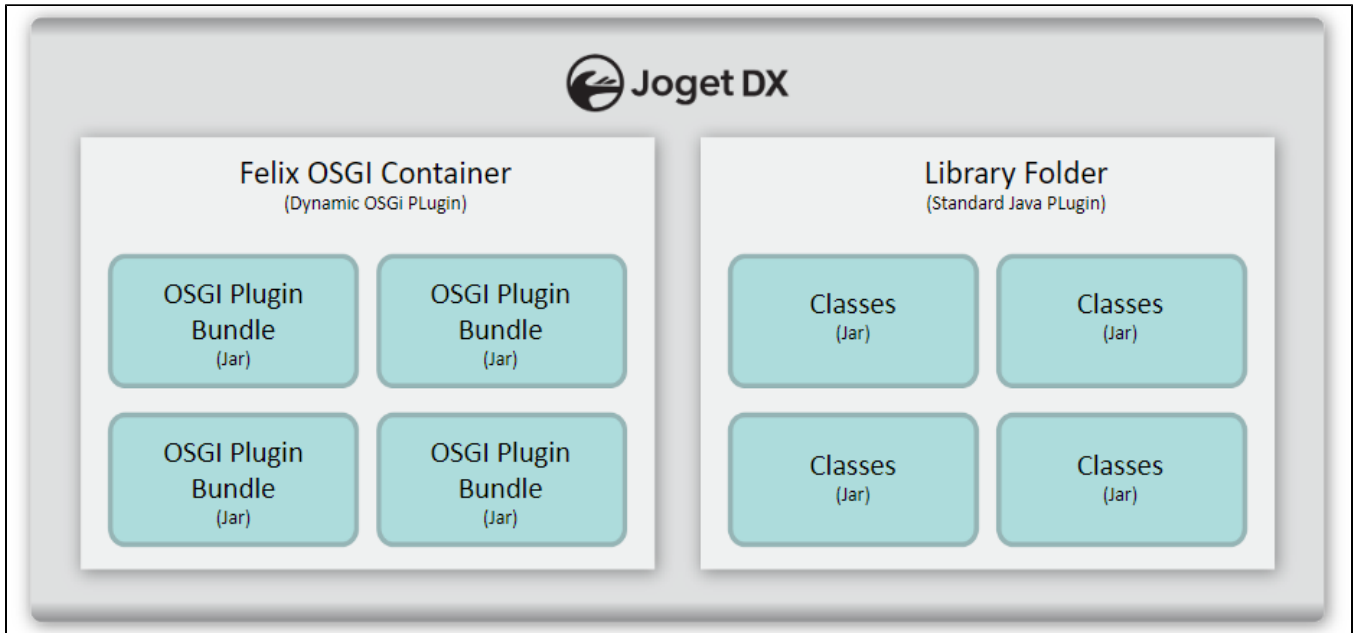


# Introduction to Plugin Architecture

- [Plugin Packaging](#)
  - [Standard Java Plugin](#)
  - [Dynamic OSGi Plugin](#)
- [Plugin Types](#)

## Plugin Packaging

Joget supports 2 types of plugin packaging, there are [Standard Java Plugin](#) and [Dynamic OSGi Plugin](#).



## Standard Java Plugin

- Build as a standard Java JAR
- Plugin classes should be placed in a package name starting with "org.joget". (*OEM release package are allowed to specify other package names*)
- Make JAR available in the Java classpath (e.g., place it under WEB-INF/lib or application server lib folder).
- Requires restarting the JVM for deployment or changes.
- May cause library version conflicts with base libraries or other plugins.
- Easier to develop and test using normal Java classes and libraries.

## Dynamic OSGi Plugin

- Build as an OSGi (Open Services Gateway initiative framework) JAR bundle.
- Deploy JAR using the [Manage Plugins](#) in the Web Console.
- Supports dynamic loading/unloading/reloading without restarting.
- Runs in isolated mode, preventing library version conflict with base libraries or other plugins.
- More difficult to develop and test due to OSGi configuration and isolation.
- Technology powering this structure: [Apache Felix](#).

## Plugin Types



### App Builder Components & Supported Plugin Types

#### Userview Builder

- Userview Menu
- Userview Permission
- Userview Theme

#### Datalist Builder

- Datalist Binder
- Datalist Filter
- Datalist Column Formatter
- Datalist Filter Type

#### Process Builder

- Deadline
- Process Participant
- Process Tool
- Process Form Modifier
- Decision

#### Form Builder

- Form Field Element
- Form Load Binder
- Form Store Binder
- Form Options Binder
- Form Validator
- Form Permission
- Process Form Modifier
- Post Form Submission Processing
- App Generator

#### Addon Builder

#### App Platform

- Audit Trail
- Hash Variable
- Web Service

#### Platform

- Directory Manager
- Web Service

- Audit Trail Plugin
- Custom Builder Plugin
- Datalist Action Plugin
- Datalist Binder Plugin
- Datalist Column Formatter Plugin
- Datalist Filter Type Plugin
- Deadline Plugin
- Decision Tool Plugin
- Directory Manager Plugin
- Form Field Element Plugin
- Form Load/Options/Store Binder Plugin
- Form Validator Plugin
- Generator Plugin
- Hash Variable Plugin
- Multi Factor Authenticator Plugin
- Process Form Modifier Plugin
- Process Participant Plugin
- Process Tool & Post Form Submission Processing Plugin
- Tensorflow Helper Plugin
- Userview Menu Plugin
- Userview Permission/ Form Permission Plugin
- Userview Theme Plugin
- Web Service Plugin