

# Features

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## 1. Commons

This module provides reusable components used in the JPL:

- `org.expasy.jpl.commons.app` - Interfaces and objects for the JPL command-line applications.
- `org.expasy.jpl.commons.base` - Basic general domain component (builder, condition, io, math, ...).
- `org.expasy.jpl.commons.collection` - Basic collection objects and interfaces.
- `org.expasy.jpl.commons.collection.graph` - Graph objects and algorithms (extended from Jung graph library).
- `org.expasy.jpl.commons.collection.render` - Statistical series and histogram renderers (jfreechart needed).

Supplied by the `org.expasy.jpl.commons` package.

## 2. Chemical Data

- Contains models for simple chemical objects like atoms, molecules or amino-acids and more complex one like biological polymers.
- Support modifiable and ionizable molecular groups.
- Provides objects to handle molecules and polymers - mass calculator, modification handler, polymer cutter, peptide fragmenter, isoelectric point calculator, ...

Supplied by the `org.expasy.jpl.core.mol` package.

## 3. MS data

- Provides Mass Spectrometry objects where a mass spectrum is presented as a peak list. In its simplest form, it contains a list of mass-to-charge values, and optionally an intensity for experimental data and/or annotation(s).
- Provides objects that manipulate spectra like filters, intensity transformers exporters, mergers...

Supplied by the `org.expasy.jpl.core.ms` package.

## 4. MS Comparison and Alignment

Provides matchers and scorers for comparison between MS spectra.

Supplied by the `msmatch` package.

## 5. IO

Provides readers/writers to import/export biological data and MS data from standards (fasta, mgf, dta, mzxml, mzml, sptxt and msp).

Supplied by the [io](#) package.

## 6. MS-Ident

Provides models for Peptide Spectrum Match (PSM) and Peptide identifications.

Supplied by the [msident](#) package.

## 7. Cross-Platform Solution

- Available as Open Source software under the [BSD License](#) which lets you use JPL in both commercial and Open Source programs
- 100%-pure Java

## 8. Next Features

Here are links to the next (in-development) features for jpl packages:

- [Core](#)
- [IO](#)
- [MS Match](#)
- [Tools](#)