

# ChemDraw® JS

#### **Frequently Asked Questions**





#### Q. What is ChemDraw<sup>®</sup> JS?

**A.** ChemDraw JS is an HTML5/JavaScript implementation of ChemDraw that enables developers to embed chemical drawing and intelligence functionality into any web based application.

## Q. What do I need to develop a ChemDraw JS Powered Application?

A. ChemDraw JS is implemented as a JavaScript library that can be readily embedded into any web based application. The host application developer needs to include an HTML <script> reference to the location

of the ChemDraw JS JavaScript files and a single HTML <DIV> tag within their page to host the drawing canvas. Chemical content can be programmatically set or retrieved from the host page via JavaScript.

Some advanced functionality such as structure clean up, chemical data format and image conversions/calculations require an additional server-side component that exposes REST services used by the ChemDraw JS client. The host application developer can enable/disable the features that require the service as well as control the service end-point used by the client.

## Q. How do I deploy ChemDraw JS with my application?

A. Package and deliver the ChemDraw JS JavaScript library and supporting REST service together with your own application. To that end, ChemDraw JS is distributed as a standard Windows installer package that deploys an embedded HTTP server configured to deliver both the JavaScript library and REST service end-points. The ChemDraw JS REST service can only be installed on a Microsoft Windows operating system. The JavaScript libraries can optionally be delivered from your own HTTP server under any operating system.

### Q. Do end-users need to install any software?

**A.** No. All the end-user needs to run is a compliant web browser with network access to the ChemDraw JS server.

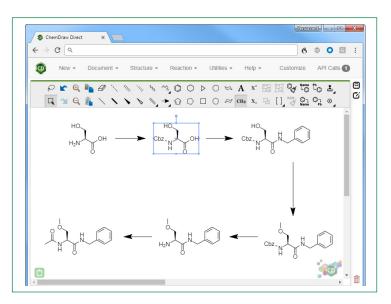


Figure 1. ChemDraw JS Drawing Pane.

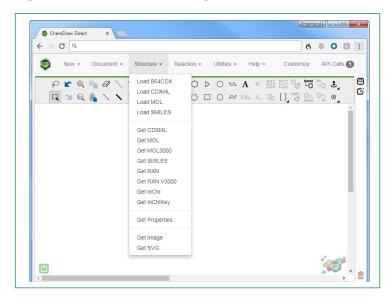


Figure 2. Available API calls for ChemDraw JS.

#### Q. What is "extended copy-paste"?

A. Modern browsers place restrictions on what data can be read from the clipboard. Most chemical drawing programs place data on the clipboard in a format that cannot be read by any web browser. Extended copy-paste enables ChemDraw JS to read chemical structures from the clipboard, but require installing an additional browser applet or extension.

Without extended copy-paste enabled, end-users must manually copy data in a supported format (CDXML or molfile) from a text file into the ChemDraw JS canvas. Recent versions of ChemDraw desktop provide a "Copy as CDXML" menu item making it possible to transfer drawings directly from ChemDraw without enabling extended copy-paste operations.

### Q. What features require access to ChemDraw JS services?

#### A. End user tools/actions:

- Name-to-Structure
- Structure-to-Name

#### JavaScript API calls:

- findReactions
- getProperties
- getSVG
- getMolecularWeight
- nameToStructure
- structureToName

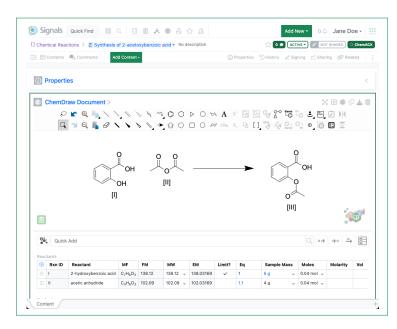


Figure 3. ChemDraw JS Sketcher in Revvity Signals™ Notebook.