

RELEASE NOTES



ChemDraw Suite 23.0

Release Notes



revvity
signals

Table of Contents

1. Signals ChemDraw	3
2. ChemDraw+	4
3. General Description	4
4. Release Qualification	7
4.1. Scope of Testing.....	7
4.2. Testing Environment	9
5. Installation Instructions	10
5.1. Prerequisites and System Requirements	10
5.2. Release Installation.....	10
6. Known Issues, Limitations and Workarounds	11
7. Technical Support	12

1. Signals ChemDraw

ChemDraw now has a new release version: Signals ChemDraw. This version is tightly integrated with the Signals platform:

- There are new Open and Save dialogs that read and write data to the user's account on the Signals cloud platform.
- Users can easily switch between Open/Save dialogs that save to the Signals cloud or locally.
- The user can also choose to open their document in ChemDraw+, the new cloud-based version of ChemDraw. If the user chooses this, the document will be closed in the local desktop app and opened in the ChemDraw+ cloud app.
- There is a new Signals licensing method that does not require Flexera activation codes for licensing: instead, users sign-in directly to the Signals platform and are authenticated through a license server on that platform. An internet connection is required to obtain the authentication, but once obtained the user can work offline for up to 30 days.
- Signals licensing is supported for all ChemDraw applications (ChemDraw, Chem3D, ChemFinder, ChemFinder for Office, ChemDraw for Excel and ChemScript).
- Licenses on the Signals platform are allocated by an administrator designated from the users' organization.
- A new menu item called "Signals" has been introduced, visible only when the user has logged into a Signals tenant. This menu item lists all the apps and tools the user is entitled to through their Signals login. These are typically things like ChemDraw+, Signals, Inventory and HELM Monomer Curation. The list of apps shown will vary according to the users' subscription.
- The Signals ChemDraw product suite has been divided into two installers:
 - One for ChemDraw alone and its dependencies
 - One for the complete suite including ChemDraw, Chem3D, ChemFinder, ChemFinder for Office, ChemDraw for Excel and ChemScript

2. ChemDraw+

ChemDraw+ is the cloud version of ChemDraw and is included with a Signals ChemDraw subscription. It allows a user to upload, create, edit, and download chemical documents in the cloud as part of the Signals platform.

Chemical drawings are stored in Signals notebooks.

It consists of:

- A dashboard, where a user can see their recently edited and favorited documents and be able to create documents from stylesheets.
- A Drawings tab, where chemical drawings can be edited or saved.
- A Notebooks tab, where notebooks can be viewed, created, or edited.
- A Favorites tab where favorites drawings are listed and can have their favorites status toggled.

Chemical drawings can be edited in the desktop or cloud version of ChemDraw.

3. General Description

The release is qualified against the following:

- Windows 10 (64-bit) and Windows 11 (64-bit)
- Microsoft Office 2019, Microsoft Office 2021, and Microsoft Office 365
- macOS 13.6.3 (Ventura) and 14.2.1 (Sonoma) - (for ChemDraw only)
- Adobe Acrobat DC

Highlights of this release:

- ChemDraw and its related apps have been rebranded to reflect their new ownership and will now show the Revvity brand name in user-facing graphics, icons, file names and file locations.

- With the ChemDraw Suite installer, the user can now choose whether to install ChemDraw and its applications as an administrator (All Users) or as a Current User.
 - To support this functionality, the option to specify installation location has been removed.
 - The other two Signals ChemDraw installers support the Current User installation only.
- ChemDraw now supports auto-update when activated using a Signals account. Upon launch, ChemDraw will check to see if a newer version is available and will offer to download and install it. This is supported if the user has administrator privilege, or ChemDraw has been installed for the current user.
- Mol V3000 is now the default format for mol file export.
- The paste operation now does not simply paste objects over each other. When an object is pasted into the canvas, ChemDraw first tries to place it at the center of the viewport. If this is occupied by another object, the pasted object will be pasted as close to the top left of the viewport as possible such that no other object is overlapped.
- The DTD CDXML definition has been relocated to:
 - <https://static.chemistry.revvitycloud.com/cdxml/CDXML.dtd>
 - This URL is now written in doctype field of CDXML files.
- Classic SciFinder has been removed from ChemDraw, but the new SciFindern remains.
- There have been some changes and additions to the HELM editor experience:
 - Monomers are now rendered in a cartoon format, with shapes that denote monomer type (e.g. peptide, RNA etc.) and color is determined by the natural analog. The default ACS Document 1996 stylesheet has been updated to render these graphic monomers.

- If a user would like to use the older labeled monomers with ACS Document 1996 styling, this is available in a new stylesheet called "Labeled Monomers".
- More characters can be seen in the monomer cartoon. The font size of the rendered text will scale up or down to fit the characters within the shape.
- The insert chevron has been replaced by a flashing vertical bar that acts like a word processor: it marks the position of insertion of the next monomer.
- Default blobs have been added to the Signals Monomer database:
 - Abody (antibody)
 - GoldP
 - Sfc (a surface)
- A new Dark Mode stylesheet is now available in the File->Open Style Sheets section.
- A new atom identifier has been introduced into ChemDraw called the atom ID. It can be used to uniquely refer to atoms on the canvas. This identifier:
 - Is guaranteed to be unique for every atom of the canvas. This contrasts with the atom number that can have repeated values across different fragments on the canvas.
 - Is an integer that monotonically increases.
 - Determines the position the atom is in when written to a mol file: an atom with atomID of N will be the Nth atom record in the mol file. The converse is also true: the Nth atom record results in an atom with atomID of N on the canvas.
 - Is not fixed. If an atom is added or deleted from the canvas, the atomIDs' may be reassigned to maintain the two properties listed above.

- The ChemDraw Cloud option on the File menu has been removed and has been superseded by the Signals ChemDraw product described above.
- The old web browser component, which depended on now retired IE11, used in the ChemDraw add-ins view has been updated to use the “Webview2” class, which depends on Microsoft Edge. This means that add-ins no longer need to target Internet Explorer.
- Reaction perception has been improved to recognize arrows which have reagents and/or data above or below the arrow, but no reactants or products on the left or right side of the arrow to be actual reactions.
- An option has been added to the Preferences->Warning to toggle on and off any errors detected in Enhanced Stereochemistry.
- The Enhanced Retrosynthesis tool has been removed from ChemDraw.
- A new version of ChemDraw Collections (formerly, ChemOffice+) installer is also included as part of every 23.0 installer bundle.

4. Release Qualification

4.1. Scope of Testing

The following testing conditions have been set and executed for this release:

- Installations:
 - Default mode
 - Custom mode
 - Side-by-Side compatibility modes
- Enhanced Functionality. Support product activation via:
 - The Flexera activation system
 - The Signals sign-in system
- Third-Party Compatibility:

- Operating Systems: Windows 10 (64-bit), Windows 11 (64-bit), macOS Sonoma 14.2 and macOS Ventura 13.6

Note: Only ChemDraw is compatible with Mac systems, not any other ChemDraw applications.

- MS Office: Office 365, 2019 (Mac & Windows), 2021 (Mac & Windows), where the latest MS Office updates used for testing are 2312 (Build 16.0.17126.20132) on Windows and 16.80 (231210177) on Mac.

Note: We test with the latest versions of MS Office available at the time, but that is no guarantee of full compatibility with future updates.

- Browsers for ActiveX Controls: MS Edge 109 (IE Mode)
- Calculation Engines for Chem3D: Gaussian 16 Revision-C.01, MOPAC2016, CONFLEX 9.C, Autodock 4.2.6, MGL Tools 1.5.4 (for Autodock), msroll.exe (Archaic), and GAMESS 2021 R2 Patch2.

Note: Chem3D supports the 64-bit version of GAMESS only.

- Python for ChemScript: 3.9, 3.10
- Visual C# for ChemScript: 2022
- Visual Studio 2022
- Regression Testing:
 - Automated regression testing of many important functionalities in ChemDraw, ChemFinder, and ChemScript.
 - Verification of issue fixes and regression testing of related features.
- Backward & Forward Compatibility:
 - Limited testing with files created using current and past versions of ChemDraw applications.
- Japanese Localization:

- Limited testing on Windows 10 (64-bit), and macOS Sonoma.
- Release Candidate Qualification Testing:
 - Digital signature verifications.
 - Sanity/Smoke test executions with all packages in mixed environments.
 - Qualification of the download executables.
 - Qualification of test orders in the Flexera Live system.

4.2 Testing Environment

The following table details the testing environments for this release:

Machine Type	Operating System	Database Version	MSOffice Version	Adobe Version
Client	Windows 10 Professional 64-bit	N/A	2019 (32-bit and 64-bit), 2021 (32-bit and 64-bit), Office 365	Acrobat DC
Client	Windows 11 Professional 64-bit	N/A	2019 (32-bit and 64-bit), 2021 (32-bit and 64-bit), Office 365	Acrobat DC
Client	macOS Ventura (13.6) (ChemDraw only)	N/A	2021, Office 365	Acrobat DC
Client	macOS Sonoma (14.2) (ChemDraw only)	N/A	2021, Office 365	Acrobat DC

5. Installation Instructions

5.1. Prerequisites and System Requirements

For information about system requirements, please refer to the DT-23.0 Hardware Software Guide (part of this release package).

5.2. Release Installation

- For Windows, the following 3 types of installers are available for version 23.0 based on various customer needs:
 - ChemDraw_Suite_23.0.0.exe
 - ChemDraw_23.0.0.exe
 - ChemDraw_Applications_23.0.0.exe
- For macOS, single ChemDraw installer supporting both licensing models is available:
 - cd23.0.0.dmg

Please note the following when installing:

- Windows:
 - Run the ChemDraw Suite 23.0 installer by:
 - *double-clicking - Depending upon the current user privileges (as Admin or Standard User), the installation for 'all users' or 'current user' will be triggered.*
 - *running as Administrator - This is also expected to work in a similar way for an Admin user. However, this is recommended if the Admin user wants to install ChemDraw Suite for 'all users'.*
 - Run ChemDraw 23.0 or ChemDraw Applications 23.0 installer only by double-clicking as it supports the 'current user' installation only irrespective of the current user privileges (as Admin or Standard User).
 - When the installer is run, prior versions of ChemDraw/ChemOffice and ChemOffice 64-bit Support (as far back as v15.0) are detected.

- A "Yes/No" dialog listing all the packages found and offering the option to remove them all, with: "Warning: This operation cannot be undone" appears.
- If prior versions of ChemScript (as far back as v12.0) are detected, a similar dialog is presented.

In both dialogs:

- i. If "Yes" is selected, the packages are uninstalled.
- ii. If "No" is selected, the packages are left as they are.

Note: Since ChemScript is integrated with the exe from v21.0 onwards, no separate dialog box will be displayed.

- The installation automatically creates desktop shortcuts for ChemDraw 23.0 executable(s) (32-bit and/or 64-bit).
- The side-by-side installation of ChemDraw (Windows/Mac) with older ChemOffice/ChemDraw versions is supported for versions prior to ChemDraw/ChemOffice 22.2 (22.0 or earlier). However, side-by-side installation with prior ChemOffice/ChemDraw versions will not be allowed from ChemOffice/ChemDraw 22.2 version onwards. For example, to install ChemDraw 23.0, the user must first uninstall ChemOffice/ChemDraw 22.2 from your system. A separate dialog box prompting to do so will be displayed.

6. Known Issues, Limitations and Workarounds

The following list describes the known issues, limitations, and workarounds for this release:

- The SciFiindern add-in is not currently functional awaiting updates from the 3rd party that supplies the add-in.
- It was observed that the ChemOffice/ChemDraw 22.2 installer is allowed to run in a system having the Signals ChemDraw or ChemDraw Applications 23.0 already installed. However, it is not recommended as it can potentially corrupt the installation.

- The 3rd party packages Conflex and Gaussian must be installed with administrator privileges to properly integrate with Chem3D.
- In rare circumstances, when ChemDraw Applications are installed as an admin user, the ChemDraw Excel functions are not shown when a ChemOffice worksheet is opened in ChemDraw for Excel. This can happen when ChemDraw or its applications are repeatedly installed and uninstalled. The workaround is to install ChemDraw Applications as a Current User.
- Python scripting in ChemFinder is not functional. When a ChemFinder is constructed and a button placed, the script attached to that button does not function.
- There is a slight visual distortion of Chem3D menus when they are in view. This is a simple visual artifact and will be corrected by a future update to the components used by Chem3D

7. Technical Support

Revvity Signals Software Support supports this software. Please contact your Sales or Services representative for more information about ChemOffice v23.0. This document is intended for general use with Revvity ChemDraw Suite 23.0 customers.




revvitysignals.com

940 Winter Street
Waltham, MA 02451 USA
P: (800) 762-4000 (+1) 203-925-4602

 Revvity Signals

 RevvitySignalsSoftware

 revvitysignals

 Revvity_Signals

 RevvitySignals