MANCHESTER 1824
The University of Manchester

CPIsuite Release Changelog

This changelog summarises notable CPIsuite enhancements, compatibility updates, usability improvements, and defect resolutions across recent and legacy releases.

Highlights

- Improved Windows 11 compatibility through updated fonts, optimised editor dialogues, and additional diagnostics for installation and licensing issues.
- Strengthened Excel and spreadsheet workflows with more reliable copy-and-paste behaviour, improved alignment, and enhanced stream-data handling.
- Expanded plotting, reporting, and flowsheet configuration options to improve usability, presentation quality, and navigation of large reports.
- Continued modernisation of the interface, help system, installation process, and development environment to support newer Windows platforms.

Version 2.9-160 (08/06/2026)

- The flowsheet zoom control now uses an exponential scale, giving users more natural control at both low and high zoom levels.
- Input data table reports now display all data and copy to Excel with correct alignment.

Version 2.9-157 (18/05/2026)

- Editor windows affected by a Windows development-environment regression now remain at their intended fixed size, while the main and graphics windows remain resizable.
- An incorrect runtime warning about a Windows %nc control being called in an improper sequence has been resolved.

Version 2.9-156 (28/10/2025)

- Selectable fonts now use the standard Windows 11 font set.
- Editor dialogues have been optimised for Windows 11 fonts.
- An instability affecting the stream data editor and Excel interface in some situations has been resolved.
- Paste Stream and Paste Stream New no longer corrupt stream data in affected circumstances.

Version 2.9-155 (17/02/2025)

- Multiple-utility targeting now supports total cost and COx emissions as objectives.
- Graphics plot background colours can now be configured separately for screen display and printing to help reduce printer ink usage.

Version 2.9-154 (21/11/2024)

- The default size of XY graphics can now be configured to better support high-resolution screens.

Version 2.9-153 (9/10/2024)

- Stored graphics attributes are now validated to prevent issues caused by corrupted CPIsuite.ini files.

- Unit text corruption in the Excel interface has been resolved.
- Interface font configuration has been added to improve alignment on non-English versions of Windows.

Version 2.9-152 (12/09/2024)

- The font scale factor is now read correctly from the configuration file.
- Additional colours are available for flowsheet editors and XY plots.
- Flowsheet editor colours and shading have been enhanced.
- Shading resolution and light bias can now be configured by users.

Version 2.9-148 (18/09/2023)

- Internal capital-cost correlations have been updated to 2021 using CECPI indices.
- Economic data now includes a facility to display capital-cost correction indices over time.
- Additional licence-file diagnostics have been added to support Windows 11 installation stability.
- Notes can now be added to all major units to improve documentation.

Version 2.9-146

- Technical support contact details have been updated.
- Development-environment libraries have been updated.
- A stream-data corruption issue triggered by Delete Stream in some circumstances has been resolved.

Version 2.9-145

- Check for Updates now downloads the updated installation image correctly when requested.
- An optional automatic update check has been added at program start-up and can be disabled in Preferences.
- The stream data editor now refreshes stream numbers consistently.
- Menu display issues caused by Windows menu-entry length limits have been addressed.

Version 2.9-144

- The default stream film heat-transfer coefficient has been changed from 2 to 0.6 kW/(m²·K).
- User preferences now reset to default correctly when data files are loaded.
- Simulated annealing can now determine initial and final annealing temperatures automatically from the initial and current best solutions.
- Annealing history can be sanitised to remove excessive values caused by non-feasible trials.
- Default backup naming has been updated to support concurrent application instances and correct clean-up on normal termination.
- HTML viewer data-alignment issues have been resolved.
- Card-index editor input sheets now support accelerator keys for Copy, Paste, and Paste New.

- Alt+F2 now toggles between the standard report viewer and the HTML report viewer for large reports with links and decorated text.

Version 2.9-142

- Development-environment libraries have been updated.
- Online help has been restructured.
- Technical support guidance has been revised and updated.
- A function has been added to check whether an updated software version is available for download.
- Pinch range targeting feedback-window issues have been resolved.
- Pinch range targeting report issues for no-utility cases have been resolved.

Version 2.9-140

- Horizontal and vertical flowsheet scaling factors are now stored correctly in CPIsuite.ini.
- The latest compiler and interface library versions have been implemented.
- The KeyView licence manager has been revised to support a single transferable licence system.
- Licence contact information can now be edited in Preferences > Licence.

Version 2.9-136

- A preference option now warns users before print operations that would generate a large volume of output.

Version 2.9-134

- The Excel interface now lets users specify the template-file location instead of relying on the application folder.

Version 2.9-133

Version 2.9-132

- The external MILP solver interface now provides clearer feedback when access or execution issues occur.
- Selected editors now support input-limit indicators, including alert icons and red text when values fall outside configured limits.
- Compiler and runtime libraries have been updated.

Version 2.9-130

- HEN grid diagram option storage has been rationalised internally.
- XY plots with integer axes now respect user-specified axes correctly.
- Flowsheet environment configuration has been standardised across packages.
- Flowsheet Treeview functionality is now more consistent across packages.
- Pop-up help issues for icon-based buttons have been resolved.

Version 2.9-128

- Flowsheet pictogram resizing is now more consistent when multiple connections are present.

Version 2.9-127

- Button styles have been modernised and icons have been added.
- Support for Windows XP and Windows Vista is no longer guaranteed because key software vendors have withdrawn support for those platforms.

Version 2.9-125

- The software support website has been incorporated into the University CEAS website, and all software and online-help links have been updated.
- The former auto-login process for the PIRC members' restricted area has been replaced by application-supplied login information.
- Application temporary files now use process-specific names, allowing multiple application instances to run simultaneously without conflict.
- Updated Silverfrost FTN95 and ClearWin libraries improve support for Windows 8, Windows 8.1, and Windows 10.
- Flowsheet-refresh issues introduced by the updated ClearWin library have been resolved.
- A direct Excel interface has been added to the stream data editor, enabling bidirectional data transfer.

Version 2.9-117

- Utility targeting now supports a constant offset when linking utilities.
- Embedded CPI and PIRC website addresses have been updated to meet new web-server requirements.
- The stream data and Excel interface has been stabilised.
- Online help now initialises correctly on Windows 8, Windows 8.1, and Windows 10.
- Applications and installation images now include version, publisher, and copyright information to reduce antivirus false positives.
- Installation help has been revised to reflect the latest capabilities.
- The help-file location can now be configured to support complex site installations.
- Save and Save As dialogues have been updated to align with Microsoft-style application conventions.
- Driving-force plots now include area information.
- Area-targeting reports now show process and utility area contributions, including stream-level area guidance.
- A Windows 10 crash caused by missing system fonts has been resolved.

Version 2.9-100

- Installation images for the AspConv and HysConv utilities have been revised.
- Application menus have been updated to align with Microsoft Office-style conventions.

- Clipboard-based stream-data transfer between applications has been stabilised.
- The default project-file folder can now be configured.
- Flowsheet images can now be saved directly to file for use in reports.
- Esc now closes most editors and flowsheet sub-functions.
- Flowsheet pictogram colours have been revised and enhanced.
- Point-targeting options have been enhanced for STAR, SPRINT, WORK, and COLOM.
- The flowsheet drawing function has been upgraded to the latest development-environment version.
- Default colour-mode issues caused by development-environment changes have been resolved.
- The development environment has been upgraded to the latest version.
- XY plots now include options to control trailing zeroes and plot borders.
- XY plot axis-initialisation issues have been resolved.

Version 2.9

- The online-help file location is now relative to the application executable, simplifying installation.
- The default installation-folder issue in the installation script has been resolved.
- Spin boxes in editors have been temporarily disabled because of a known issue.
- A workaround has been added for online-help start-up crashes on Windows 8, Windows 8.1, and Windows 10.
- The project development environment has been upgraded to FTN95 to support newer Windows versions.
- The interface to third-party graphics libraries has been revised to remove obsolete function calls.
- The units-conversion editor now uses application-specific unit lists to streamline user options.
- Individual XY plot titles can now be switched off to improve printed and exported output.

Version 2.8

- XY plot default line types have been updated.
- Physical-property calculations for Cv, Cp, and Gamma have been improved to better reconcile with HYSYS and Aspen results.
- Client ID and Project ID fields have been added to the project description to improve case-study management.
- Project-description issues have been resolved.

Version 2.1

- The utility data editor can now invert utility temperature profiles, enabling utility type changes between hot and cold profiles.
- Utility data can now be copied to and from spreadsheets via the clipboard.
- Fuel-data unit-conversion issues have been resolved.
- The stream data editor now displays more streams.
- Utility editor copy-and-paste operations now preserve threshold and fixed-load information correctly.

- Composite-curve XY plots can now place both composites on the clipboard simultaneously.
- Operating-hours conversion issues have been resolved.
- The stream data spreadsheet interface now incorporates capital-cost classes.
- Conversion units now support significant-digit and decimal-place configuration.
- Basic Excel interface functions have been added to the equation editor.
- Equation-sheet crash issues have been resolved.
- Multiple-pinch handling issues have been resolved.
- XY plot colour-selection issues have been resolved.
- Additional grid-function options have been added to XY plots.
- User text boxes on flowsheets now support configurable text size.
- Editor page-key shortcuts now use Ctrl+Home and Ctrl+End to align with Windows standards.
- Utility-editor sort-order issues have been resolved.

Version 2.0

- Additional stream sort orders have been added to the design grid and network editor.
- A crash in the Aspen converter has been resolved.
- The stream data editor now includes safe-side regression to reduce the number of stream segments.
- Stream data can now be generated from the physical properties calculator.
- Ctrl+P printing issues have been resolved.
- Clipboard paste in the stream data editor now supports append or replace options.
- The stream data editor now includes additional tools for changing HTC and local DT contributions.
- The stream-profile tool now displays and calculates the difference between two operating points.
- Stream copy, paste, segment merging, de-segmentation, and temperature-limit trimming tools have been added to the stream data editor.
- Additional controls have been added for XY plot titles and conversion units.
- Utility capital costing is now incorporated correctly in range targeting.
- Targeting utility placement now supports fixed and threshold loads.
- Axis-labelling issues on integer-based plots have been resolved.

Version 1.8

- Default unit sets can now be imported from and exported to data files.
- PFD icon font size is now user scalable.
- Default PFD colours have been updated and the configuration menu has been rationalised.

Version 1.7

- PFD unit-name display is now configurable.
- An external MILP solver interface for GAMS has been added to support larger optimisation problems.
- The New wizard has been rewritten to remain open between processing steps.
- Page-key shortcuts now use Ctrl+PgUp and Ctrl+PgDn to avoid conflicts with the equation editor.
- The PFD locate function has been revised.

- PFD sub-task closure is now intercepted to prevent the application from hanging.
- A Reset Connections option has been added to resolve node-placement issues in legacy files after icon-size changes.
- FT versus P and FT versus XP plots have been added to exchanger capital-cost editors.
- Currency conversion in the units editor has been simplified and is now handled when calling internal correlations.
- Some packages now allow output decimal places to be configured.
- Components can now be marked as inert to exclude them from equilibrium calculations.
- Flat-style toolbars have been implemented.
- The Salflibc.dll library has been updated.
- Obsolete unit classes have been withdrawn.
- Filled and shaded graphic entities have been added, and the default background colour has been changed.
- An online interface to Aspen Properties has been implemented.
- IF-ELSE blocks have been added to the equation editor, and simultaneous linear-equation functionality is now available within equation models and as a standalone function.

Version 1.6

- Portrait-printing size issues in the PFD environment have been resolved.
- XY plot line-coordinate data and attributes can now be saved to file.
- Individual XY plot data sets can now be switched on or off.
- Toolbars have been added to report windows and the stream data editor.
- Coloured text has been added to the stream data and utility data editors.
- Text-based reports can now be viewed in the default HTML viewer, with additional text attributes and index links.
- Toolbar buttons have been updated to a flat style aligned with common Windows applications.
- Currency conversion has been simplified, allowing users to change the internal currency used by the packages.
- A PFD issue causing edit boxes to reopen when the pointer was not fully on the drawing surface has been resolved.
- Support for fixed-format data files has been withdrawn.
- Fugacity calculations have been added to the physical properties calculator.
- A HYSYS interface issue in holding mode has been resolved.
- Report-window crashes caused by attempts to write to read-only files have been resolved.
- Equation-compiler handling of negative exponents has been corrected.
- Short-menu options have been added to reduce menu overcrowding, with less common options available through fly-out menus.
- XY graphics now support integer axes where appropriate, and both X and Y axes can be inverted dynamically.
- The Aspen column converter has been updated for Aspen 10.2 and now requires zetool.dll instead of stf.dll.
- The packages can now run from folders with spaces in their names without corrupting graphics fonts.

Version 1.5

- A New Project wizard has been added to guide users step by step through problem setup.

- Graphical output has been improved with legends, user-defined annotations, and stream-population reporting at selected points on composite curves.
- The help system has been extended and modernised to align with updated technology.
- The main toolbar is now user configurable to support the expanded application functionality.
- Status-bar feedback help can now display help messages for main-window icons.
- The main program-window layout is now configurable, allowing users to control how much desktop space the program uses.
- Graphic images from PFD editors can now be transferred to other applications via the clipboard.
- Graphic line types and colours are now user configurable.
- User annotations can now be added to XY graphs.
- The physical properties system now includes an interface to the IK-Cape Open system.
- Report windows can now be configured to maximise on start-up.
- The help system has been fully revised to align with Windows standards, including search and print functions and access outside the application.