

Visual C||Cure

Release Notes

Table of Contents

4r9426 (from 4r9231) 12-Feb-2024.....	2
4r9231 (from 4r9169) 11-May-2023.....	3
4r9169 (from 4r9018) 6-Feb-2023.....	4
4r9018 (from 4r8980) 13-Sep-2022.....	5
4r8980 (from 4r8948) 21-Jun-2022.....	5
4r8948 (from 4r8774) 28-Apr-2022.....	6
4r8774 (from 4r8771) 6-Jan-2022.....	7
4r8771 (from 4r8624) 17-Dec-2021.....	7
4r8624 (from 4r8437) 9-Jul-2021.....	8
4r8437 (from 4r8364) 17-Feb-2021.....	9
4r8364 (from 4r8948) 27-Nov-2020.....	10
4r8296 (from 4r8279) 5-Oct-2020.....	10
4r8279 (from 4r8157) 24-Sep-2020.....	11
4r8157 (from 4r8040) 26-Jun-2020.....	11
4r8040 (from 4r7865) 4-Mar-2020.....	12
4r7865 (from 4r7862) 18-Oct-2019.....	13
4r7862 (from 4r7858) 16-Oct-2019.....	13
4r7738 to 4r7858.....	14
4r7610 to 4r7738.....	14
4r6964 to 4r7610.....	15
4v6r0 to 4r6964.....	17
4v5r0 to 4v6r0.....	17
4v4r0 to 4v5r0.....	18
4v1r0 to 4v4r0.....	19
4v0 to 4v1r0.....	19
3vXrY to 4v0.....	20

4r9426 (from 4r9231) 12-Feb-2024

New Features/Mods:

- Add report attributes to Validate info
- Dropping a single pin onto an existing datamap/display/report/historical items now keeps the existing array index
- Removed Width & Leading Zeros from non-report pin properties
- Where appropriate, show raw and formatted pin value(s) in properties bar
- In Workspace bar, show errors in locked containers
- Validate now reports if a locked container has a child codeblock with build errors
- Add support for "separator" pins on containers (to allow pins to be visually grouped)
- Check parameter array size in function calls
- Check parameter format in functions calls
- Parameter formats for printf() type functions now validated when building codeblocks
- Grid item combo boxes are now "inline" (pulldown vs dialog box)
- File no longer removed from Recent Files list if (as an example) the wrong password is entered
- Maximum Recent Files size increased to 10 entries
- Add column headings when copying displays tree to clipboard
- Add support for Significant Figures
- Allow comms blocks to be moved up/down
- Creating Codeblock/Comments block/Containers via keyboard shortcuts places the block at the current cursor (if valid)

Fixes:

- Don't set "document modified" status if the datamap alias cell clicked but not changed
 - In the Properties Bar, prevent "read-only" properties such as, block checksum, from being edited
 - Fix initial pin values / tables when loading comms templates
 - Show pin units even when the pin uses a lookup table
 - Fix Reports Active Index value lookup
 - Fix issue when dragging multiple report placements
 - Select correct screen item (pin vs block) when locating Validate errors
 - Prevent comms i/o pins being moved up/down beyond the first/last pin in the block
 - Update comms block library status when comms pins moved up/down
 - Invalid active values in report placements now correctly shown in red
 - Recent Files entry now kept if application open is cancelled mid operation
 - Fix potential screen redraw issue when application open is cancelled mid operation or fails
 - Fix "connected pins" highlighting
 - Ignore empty datamap aliases when loading/saving to library
 - In the Reports placement list, dropping a non-array pin onto a pin with an existing array index resets the index to 0
 - Invalid report placements are now always highlighted correctly in red
 - Disable new i/o pin/separator when pin already selected
 - Various bug fixes
-

4r9231 (from 4r9169) 11-May-2023

New Features/Mods:

- Various speed-ups of user interface
- Impose limit of maximum 16 datasets
- Display inherited Units, ADP, Table and Field Table values in Properties bar
- When updating blocks from library, show new dialog to allow updates to (a) just selected block or matching blocks on (b) current page or (c) entire app
- Report Editor updates (horizontal scrolling, "sticky" line numbers on Left Hand Side, add zoom limits)
- Add "linked pin" custom colours
- When selecting a pin, any linked pins are also highlighted

Fixes:

- ReportEditor 'background' text now has transparent background to match website, PDF and Postscript
 - Prevent possible crash when deleting/renaming blocks
 - Fix "in use" values when restoring block changes via Undo/Redo
 - Report Editor now honours dynamic ADP values
 - Prevent copy/cut/paste/delete/etc when performing drag/drop operations
 - Fix "non-printing characters" no longer being shown (broken in r8312)
 - Fix possible crash when editing datamap entries that reference invalid pins
 - Fix blank comms pin name (e.g. when drag/dropping newly added comms blocks)
 - Double-clicking comms pins (from Displays, Datamaps, etc) now locates the pin correctly
 - Include pin alias when filtering Datamaps
 - Update main window when toggling "View Aliases"
 - Fix incorrect Array Index check when validating reports
 - Show correct icon ("blank", not locked block) for comment blocks in the Workspace tree
 - Various smaller fixes
-

4r9169 (from 4r9018) 6-Feb-2023

New Features/Mods:

- Comms polls list now supports DELETE key
- Invalid pins & triggers now highlighted in red
- Add "Copy" functionality to Alarms, Languages and Object Explorer tabs
- Enhance Validate function – now checks Historicals and skips invalid pins when checking for duplicate datamap pins
- Fix so that new blocks don't get added outside the page boundary
- On the Displays tree, you can now select multiple rows and perform Delete/Remove Ident/Remove Active
- Properties bar comments/description box now auto-wraps long text
- Scroll wheel now jumps 3 lines in [Alarms] tab
- On Displays bar, double-clicking on screen/report display item brings up properties dialog
- In Report Editor, mark document changed if placements move when lines inserted/deleted
- Add support for images in Report Editor
- Add Trigger and Visible info when copying report to HTML

Fixes:

- Fix Alarms tab so it shows the correct alarm state
- Fix incorrect '&' on codeblock input variables properties
- Fix possible crash when sorting via Groups column in Object Explorer
- Fix possible crash when updating library blocks
- Zoom now maintains better block & link layout
- Fix crash when deleting blocks and (eg) display pin references pin in sub-block of the deleted block
- Fix table count when updating comms blocks with clashing tables
- Update (i.e. renumber) comms poll list correctly when a poll is deleted
- Correctly update Languages tab when importing languages to comms blocks
- Fix incorrect "...[-1]" text when non-array Historical trigger removed
- Fix saving top-level Main container to library
- Importing container/comms languages now updates displays/datamaps/reports bars correctly
- Multiple selecting items on Reports Bar and Report Editor now updates correctly
- Ensure Setup filter index is updated when adding/removing/renaming pins/blocks
- Prevent crash when clicking on grid items (regression from r9064)
- Right-click **not** on container now enables "Add New Input/Output Pin" (apart from when at top-level)
- Right-click on codeblock now disables "Add New Input/Output Pin"
- Fix possible crash when deleting containers with sub-containers
- Ensure block description is read-only if block is locked
- Correctly update block sync status when description changes
- Fix possible crash when pasting blocks
- Fix library sync when sub-block is a missing library block
- Fix missing sub-block library version when saving blocks to library
- Update resource usage when loading block from library
- Correctly update pins in displays, datamaps and reports bars when updating library blocks

- Fix spurious row selection when using drag/drop with SHIFT or CTRL key
 - Prevent possible invalid ident index when dropping display pins
 - Fix possible incorrect link update when renaming pins
-
-

4r9018 (from 4r8980) 13-Sep-2022

New Features/Mods:

- Exporting block aliases now shows all pins (regardless of any existing alias)
- Codeblock Variables bar now has:- highlight on value change, array grouping, sorted variables
- Only INTs can be dropped onto Report trigger/visible pins or Active lines
- Flag error when array access is attempted on non-array variable

Fixes:

- In codeblocks, declaring top level variables that clash with function parameters now raises an error
 - Fix handling of stand-alone "scope" blocks "{...}"
 - Non-array items on Active Report Lines now grey out Array Index item
 - Rework fix for "sticky" report placement (r8821) so that BUTTON grid items work correctly
 - Refresh [Languages] tab when adding/deleting/renaming/importing language
 - Fix expired license key check
 - More invalid array detection (eg `int a[1] = 1; int b = a[1];`)
 - Fix possible crash when validating comms links
-
-

4r8980 (from 4r8948) 21-Jun-2022

New Features/Mods:

- Warn if user unable to export datamaps, displays, etc (eg if file locked)
- Add new "Merge or Overwrite?" dialog when importing datamaps

Fixes:

- Correctly update displays tree when report name changed
 - Update breadcrumb when unlocking locked blocks
 - Fix unable to delete tables
 - Correctly update table usage when deleting tables
 - Correctly update table usage when updating library blocks (and there's a table clash)
 - Inform user when input pins are "unlinked" when updating library blocks
-
-

4r8948 (from 4r8774) 28-Apr-2022

New Features/Mods:

- Enable "Save to library" for top level container (BUGZ 605)
- Added autoscroll when dragging pins or blocks off edge of view window
- Allow multi-selected report placements to be moved up/down the list
- Allow Copy/Paste of blocks to work across multiple instances of VCCure (BUGZ 1087)
- Moving a block brings it in front of other blocks
- Dragging/dropping a pin moves the block to the front
- Tweak "copy report" HTML output
- Ensure live reports are shown as "read-only" in the displays tree
- Add report type(s) to Validate info
- Active Pin on Displays tree now supports array index (BUGZ 978)
- Line Active rows on Reports now support array index (similar to BUGZ 978)
- Report placements with no pin reference now shown in Validate info
- Comms blocks with no I/O pins now visible in top level container (to allow library updates, etc)
- Blocks can now be resized horizontally (vertical height is still set by the number of I/O pins)
- Indicate block type when showing table usage
- Reduce flicker when resizing splitter windows
- Move Resource Usage from Properties dialog to Validate info
- Comms poll dialog now displays pin aliases where applicable
- Allow tables to be copied as "const int abc = xyz" text for use in codeblocks
- Show report "storage usage" in Validate (even when no errors)
- Add new "comment" blocks
- Remove obsolete "Set as filter" option from Workspace popup menu
- Add extra filtering options in SETUP and LANGAUGES tab (containers, codeblocks, comms, comments)
- Select relevant Workspace item when double-clicking items on Object Explorer or Languages view
- Units/ADP/etc lookup pins now correctly sorted in Properties bar dropdowns
- Allow comms blocks to be renamed via the Properties bar
- Remove comms link unused "Properties" and "Advanced" buttons
- Remove unused comms links parameters (eg REMOTEDATAMAP, PASSWORD, etc)
- Comms link now uses standard Librarian dialog
- Add search filter to Datamaps bar
- Code editor now supports F3 to repeat last search and has its own Find toolbar
- Validate now checks for duplicate pins in TAGNAMES datamap
- "SYSTEM" setup is now maintained when loading/saving documents
- Make sure dialog boxes are forced on-screen when they open

Fixes:

- Fix typo in Displays bar popup menu (BUGZ 1098)
- Undo/Redo now handles Alarm pins correctly
- Fix Validate sometimes missing unused tables (if block was loaded/updated from library or pin table/fieldtable is changed)
- Prevent crash when multiple instances of VCCure are running
- Fix Z-order when selecting pins or blocks

- Fix "Copy Report" to allow for formatting codes
 - Report placements correctly highlighted in red when first placed (as the pin reference is missing)
 - Fix "sticky" report placement when selecting between report editor and placement list
 - Correctly flag any invalid pins when a comms block is deleted
 - Ensure "modified document" flag is set when changing Summary text
 - Language import/export now works correctly for comms blocks
 - Ensure data returned from CGFile::ReadLine() is null terminated
 - Fix potential crash in Properties bar when selecting "read-only" properties
 - Fix broken 'continue' in if() statements
 - Hide empty / hidden table entries when changing Report placement array index
 - Populate initial report placement values when adding a new report from a template
 - Prevent Validate view from flickering when in Remote Debug mode
 - Prevent wrapped pins being dropped onto the wrapped copy
 - Adding pins to empty comms link now correctly maintains existing comms pin linkage
 - Updating comms link now correctly maintains existing comms pin linkage
 - Changing the base setup, now correctly updates the selected setup if the pin is set to <Base>
 - Make Displays tree update correctly when changing "live report" type
-
-

4r8774 (from 4r8771) 6-Jan-2022

New Features/Mods:

- No Changes

Fixes:

- Fix non-working keys in code editor (eg cursor keys, backspace, delete, ...)
-
-

4r8771 (from 4r8624) 17-Dec-2021

New Features/Mods:

- Add "Copy to clipboard" button to Validate tab
- Initialise variables to zero when no value specified (eg "int a;")
- Validate now checks for unused tables, duplicate tagnames and invalid pin/block names
- Arrays can be initialised to non-zero using (eg) "int a[5] = { 123 };"
- Validate now handles codeblock errors better (counts code errors, navigate to error line)
- Suppress codeblock errors when navigating from console or validate
- Suppress codeblock errors when loading app
- Tweak tooltips so they (a) show the block description and (b) work in remote debug

- Rework "active" display node indication to change whole row
- Show IP clashes (in orange) in "Remote Machines" bar
- "Application Browser" dialog now uses built-in tree view to navigate
- Last used "Update IO/Firmware" folders now remembered
- Alert user if unable to get Read Access on I/O or Firmware update file
- Speed up scrolling on Validate tab
- Reset report editor zoom using Ctrl+1
- Ctrl+NUMPAD1/2/3 now do the same zoom as Ctrl+1/2/3
- Reset code editor zoom using Ctrl+1 (or Ctrl+NUMPAD1)
- Add support for custom line widths and custom colours
- Add SDCard and FTP to Report printer options dialog
- Scale line widths when zooming in/out

Fixes:

- Update library sync status when adding/removing pins on comms block
 - Fix being able to enter invalid comms name on Properties bar
 - Fix pre/post increment/decrement on array variables
 - Fix "Languages | Import/Export" popup menu
 - Fix logic of when to save a <DATAMAP> element to comms library files
 - Fix possible crash when updating library file
 - "Application Browser" sort fixed (indicator arrow and case-insensitive)
 - No need to update Save icon if modified state not changed (fixes various slow-downs)
 - Fix loading library codeblocks with alarm pins
 - Fix possible false "ip clash" if unit not yet seen
 - Increase Alarm/Event list member buffer size to prevent memory corruption / crash
-

4r8624 (from 4r8437) 9-Jul-2021

New Features/Mods:

- If app has more than one dataset, prompt for which one to use when loading
- Rework of Undo/redo logic
- Add new "Validate" tab (replaces Edit | Validate/Check App menu)
- Dimension mismatch on linked pins will now warn and remove the link
- Where possible (i.e. constant expressions), array index checked when building codeblocks
- Show path as tooltip when asking for container/codeblock password
- Remove RemoveNonExistantRefs() as it's now handled via the Validate tab
- Remove IssueConsoleWarnings() as it's now handled via the Validate tab
- Alarms tab now shows live "active" status of each alarm pin (PINK == inactive)
- Add "Go to" Table & Field Table source to popup menu
- Change pin highlight to make it more visible
- Add "Clear Recent Files" menu option
- Implement more standard look & feel to grid views
- When saving block to library, auto-update sync status of any other block using same library file

- Double-clicking on "index" grid items brings up option select dialog
- Double-clicking on Validate library block checksum (data#1) column toggles "record checksum" setting
- Rename "Lid" display to "Integrated" display
- Comms blocks can now be linked to & updated via library manager
- Validate now forces a library sync refresh (where applicable)
- Add extra info when creating datamaps clipboard data
- Pin "usage" list now includes report Trigger and Visible pins
- Increase default remote debug socket timeout from 5sec to 30sec
- Add support for "continue" statement in for() and while() loops
- Prevent blocks/pins being changed when in Remote Debug mode
- Validate now checks for duplicate alarm pin names

Fixes:

- Fix possible incorrect block checksum compare
- Copy & paste now preserves library link information
- When deleting pin or block, refresh inherited "in use" values as they may have changed
- Prevent codeblock pins from being deleted
- DELETE key now deletes the correct item(s)
- Fix library block sync check when deleting tables
- "Go to" Units/ADP Source logic fixed
- Remove confusing "ident link has changed" warning
- Fix alarm pins when loading from library or on copy/paste block
- Correctly clear selected report placements grid item when clicking between editor and placement list
- Fix saving/loading library blocks with nested library blocks
- Removing library link from block now updates (re-sync) parent containers correctly
- Reset library version of non-library child blocks when saving to library
- Fix possible alarm list corruption when updating block from library
- For datamap entries, don't save <DB>, <ID>, <AI> or <DIM> when comparing / saving to library
- Correctly report code errors in if() statements
- When remote debugging, don't rebuild pool:index database (it breaks old apps pre about r8116)
- Ensure Alarms view gets updated when importing language aliases
- Prevent crash when importing top-level aliases

4r8437 (from 4r8364) 17-Feb-2021

New Features/Mods:

- Add support for "Lid" display tree
- Save app datetime in <INFO> section
- In app browser dialog, display filesystem timestamps with '*'
- Don't disable code editor when Find/FindReplace dialog open

- Support non-numeric firmware version in ZeroConf broadcast (e.g. "Installing...")
- Update "Click To Copy Serial Number" button in About box

Fixes:

- Close dropdown lists when you click outside the list
 - Fix possible crash when rebuilding language view
 - Prevent block checksums from changing when library location changes
 - Remove duplicate (and incorrect) checking of "NEXTID" value on app load
 - Fix loading comms templates (loading <TABLES> and screen refreshing)
 - Restore missing code error exclamation on code-blocks
 - Fix incorrect resource counts list in Properties dialog (broken in r8212 when SYSINFO2 pool added)
-

4r8364 (from 4r8948) 27-Nov-2020

New Features/Mods:

- Tweak Report Editor to add better handling of scrollbars and large report text
- Display outcome of datamap import process in Console
- Lines starting with '#' ignored during datamap import process

Fixes:

- Fix checksum handling when library file missing
 - Fix screen refresh issue when prompting for app password
 - Fix datamap import when "description" column missing
-

4r8296 (from 4r8279) 5-Oct-2020

New Features/Mods:

- Update properties pane when doing "checksum compare"

Fixes:

- Fix crash when doing copy/paste container
 - Sort new alarms after copy/paste codeblock/container
 - Keep library save version when comparing blocks to maintain checksum if library file missing
 - Rebuild execution order when comparing container with library
 - Prevent crash when closing tabbed view
-

4r8279 (from 4r8157) 24-Sep-2020

New Features/Mods:

- Task xmlcomms now works under Windows
- Add extra info when saving TAGNAMES datamap
- App hash now calculated on main <CONTAINER> only
- Legacy apps (saved before this change) still use old "whole app" hash
- Save GROUPS info into displays tree items (so e.g. xmlcomms can pick up any METROLOGY group)
- Add "Storage usage" indicator to report property dialog
- Report storage checked on pin placement assignment or pin dimension change

Fixes:

- Fix sorted dynamic pins
 - Fix UTF8 strings in Object Explorer, Datamaps and Historicals bars
 - Prevent array pins from being dropped onto Historical/Reports trigger/visible pins
 - RefreshManager now correctly handles changing pin dimension
 - Use table string aliases when creating "TAGNAMES" clipboard data
 - Fix dynamic pin handling when doing block copy/paste
 - Fix DB index bug when saving comms datamaps
 - When updating target template, ensure "in-use" variables are updated before calling the RefreshManager
 - Improve how units are matched when ZeroConf packet received
 - Fix library save when dynamic pins reference a pin outside the block
 - Prevent flickering Properties pane when dropping pin onto Reports bar
 - Don't save pin DB and ID to comms library blocks
-

4r8157 (from 4r8040) 26-Jun-2020

New Features/Mods:

- Add "Validate" option to block pop-up menu
- Add "modified" indicator to Save icon
- Change report/code editor font to Lucida Console to fix "overwrite" caret bug
- Code editor now supports SHIFT + click when selecting text
- Use sorted CScreenItemList to fix execution order changing on reload and to show sorted breadcrumbs
- When adding new codeblock/container pins, set tables to "inherit" by default
- Add "Quick Save" function
- Dynamic pins (e.g. ADP, UNITS) now sorted when shown in pin properties
- Create special table data when copying "TAGNAMES" datamap to clipboard

Fixes:

- Fix pin value init when loading blocks from library
 - Unlocking block no longer sets "file modified" flag
 - Check (and fix) container sizes when app loads
 - Improve version handling when loading/saving library blocks
 - Prevent possible datamaps crashes when adding blocks
 - Update VI map when updating library blocks
 - Check (and fix) 'reset to x' / linked pin clashes when app loads or on library update
 - Check for "date/time" property in CVariableItem::GetValueAsString()
 - Fix "date/time" and "ip address" pin properties so they update correctly when toggled
 - Ensure new alarms are setup correctly when loading library blocks
 - Fix library load/save/compare to work correctly for different library versions
-

4r8040 (from 4r7865) 4-Mar-2020

New Features/Mods:

- Add support for new Modbus comms link
- Also look for comms links in "Comms" subfolders
- On codeblock rebuild, check linked pin array sizes (and unlink if they no longer match)
- On app or container load, warn of any mis-matched array sizes
- General speed-up
- Changing library path now updates Workspace tree sync status for each library block
- Reinstate saving LIBNAME to library files
- Add username and date to comments when saving library blocks
- Sanity check "reset to x" property when saving pins
- Multiple display items can be moved up/down using "u" and "d" keys
- Add better highlighting of array index errors in datamaps/displays/report/historical bars
- Validate now checks for valid "active value" values and invalid array indexes
- Validate now shows number of errors/warnings per section

Fixes:

- Fix dropping comms block pins onto a container
- Fix alarm list when pasting containers/codeblocks that have alarm pins
- Retain previous container/codeblock checksum if library file goes missing
- Fix report "Report and/or Screen" property checking
- Fix codeblock expression checking and parsing of unary operators
- Fix librarian tree highlighting
- Fix confusing "locked block skipped" message when exporting container aliases
- Ensure un-initialised variables default to zero
- Updating library blocks now retains values of top-level unconnected inputs
- Prevent sidebars from resetting when double-clicking inactive buttons/etc
- Prevent possible crashes when no report selected
- Don't allow codeblock pins to be moved using 'u' and 'd' keys

- Speed up "save block to library"
 - Refresh main view when deleting comms block
 - When saving comms block to library, ensure top-level <LINKNAME> elements don't get saved
 - Improve error handling when "file open" fails
 - Rebuild execution list when saving (to fix "file changed ..." warnings)
 - Fix possible incorrect table entries when pasting blocks
 - Fix moving "reset to x" property when drag/dropping pins
 - Fix potential crash when updating properties of wrapped pins
 - Correctly update "in use" tables when setting a pin to <inherit>
 - Fix reports bar to maintain selected rows when changing pin properties
 - Correctly update invalid pin status (on Displays, Datamaps, Reports) if the pin gets re-created
 - Fix [Object Explorer] item filter
-
-

4r7865 (from 4r7862) 18-Oct-2019

New Features/Mods:

- No Changes

Fixes:

- Revert fix from 4r7862 as it did not improve the situation
-
-

4r7862 (from 4r7858) 16-Oct-2019

New Features/Mods:

- No Changes

Fixes:

- Improve Save execution order
-
-

4r7738 to 4r7858

New Features/Mods:

- Don't save which library (User/Shared), the path of where the library is stored or the name of the library to any library files (so the checksum is maintained when moving library files around)
- Compact the database before saving
- Report "visible" and "trigger" pins now highlighted red when invalid
- Add "library info" to Validate App code
- Add default comment header to new codeblocks

Fixes:

- Deleting a pin now correctly resets any linked pins (BUGZ 1078)
 - Fix "record checksum" loading bug
-

4r7610 to 4r7738

New Features/Mods:

- Displays tree now fully collapsed on app load
- Save/SaveAs now shows version/notes dialog first and can be cancelled cleanly (BUGZ 1076)
- Added size of report checking on app load/save – based on the amount of memory required (BUGZ 1077)
- Remove Draconian version checking introduced in release 4r7540
- Blank datamap addresses are no longer highlighted as an error
- Prevent "reserved" characters from being used in library/codeblock/container/variable/datamap names
- Holding down CTRL when dropping array pins now drops only a single pin
- Reworked checksum calculation so that TABLES are no longer included

Fixes:

- Enhancements to syntax checking
 - Prevent crash when renaming pins present on displays tree
 - Don't remove invalid datamap pins when adding a comms block ... they're now highlighted in red instead
 - Prevent crash & duplicate dialog when changing container/codeblock password
 - Fix "Reset All" option in View|Bars menu
-

4r6964 to 4r7610

New Features/Mods:

- Add code/report editor zoom using CTRL + MouseWheel
- Scroll wheel now jumps 3 lines in code editor
- Don't auto-focus on Properties when adding a new codeblock/container
- Add import/export of datamaps
- Added RAM-based Historical Slot
- Can now use DEL key to delete selected placements
- Checksum on locked blocks can now be copied
- Added "max width" marker to Report Editor
- Added Report Editor shortcuts CTRL-B for bold and CTRL-U for underline
- Add "max string length" support to value edit dialog
- Add "duplicate" option to "Add Table" dialog
- Change report/code editor font (for better BOLD rendering)
- Don't load apps if they were saved in a *newer* version of VCCure
- Warning shown if app changes when loaded from different VCCure version
- Show "[Main]" in Alarms/Setup explorer rather than empty block name
- Report editor reworked to handle UTF8 characters better
- Report editor now supports HOME/END/DELETE keys
- If a locked block is selected via a breadcrumb, show the block itself rather than the contents
- "Run" button now performs a warm start (rather than "continue")
- Added "Coldstart + Run" button which performs a cold start before running app
- Added "Run Once" button which performs a single cycle of the entire app
- Added breakpoint support
- Added code outlining
- Attributes for reports/displays now allows 128 chars.
- Soft functions supported in variable declaration, e.g. `int x = myfunc();`
- Soft functions supported in existing variable non-equals equal types, e.g. `x += myfunc();`
- Allow reports to be moved up/down in the list
- Add direct connect Ident LED strobe (previously only worked for local machines)
- Resource usage added to popup menu for block view. Prints pool counts and % usage of the selected block to the console
- Ensure remote debug stops when VCCure closes
- Workspace error/warning highlighting updated
- Max codeblock line length increased to 512 chars
- Increase File|Properties dialog window size
- Add various extra keyboard shortcuts
- DELETE key now works in edit boxes
- Add "Visible" pin to Reports bar.
- "Clear" buttons added to report Visible and Trigger pins
- Show Aliases on Historical/Reports TRIGGER and VISIBLE pin paths
- Save/link to library separated out on menus.
- Blocks show L for linked to library but no file.
- Save/link/unlink from library on locked blocks doesn't need the password.
- Copy Serial Number To Clipboard button added to about box.
- Add ability to drag input/output pins

- "Code differs" message added
- Load/Save referenced tables along with commsblocks.
- Languages save to library blocks.
- Language import/export implemented at block level.
- Backing up application now includes System settings

Fixes:

- When loading from the library, update aliases before alarms
- When comparing with the library, always use library checksum (if it exists)
- Fix Unicode string handling in "Edit Variable" dialog
- Fix/rework table merge code
- Fix pasting placements into report editor
- Fix text cursor position when right-clicking
- Dragging codeblock outputs to displays tree now leaves IDENT blank
- Only allow unconnected pins to be dragged onto displays tree IDENT field
- Copy/paste containers & codeblocks now retains persistent pin values
- Fix missing alias when re-selecting units/ADP pin
- Fix table lookups on report placements
- Ensure blank block checksums get ignored when saving/loading
- Don't load codeblock NV output pins from setup
- Unicode now better supported in Tables editor
- Block language import/export changed to TSV file
- Language import/export changed to TSV file
- Copying a block updates the breadcrumb
- Fix for empty pool names in VCCure properties (and possibly elsewhere)
- If applicable, show error message if remotedebug poll fails
- Show correct SVN version info in About dialog
- Disallow duplicate global variables
- Fix possible hang when retrieving reports
- Update Workspace bar when adding new container/codeblock
- Ensure workspace tree rebuilds correctly
- Fix when deleting comms links
- Remove spurious values in comms poll xml
- Fix pin name scanning when saving comms links
- Fix multi-line array decoding
- Fix loading preset values from comms links
- Fix loading preset values from comms link templates
- Fix Unicode error in language pin description
- Prevent Historicals "Set X" tabs from being re-ordered
- Prevent "<inherit>" being treated as a valid table name in <DISPLAYS> tree
- Tables import/export fixed to work with TSV files
- Creating a pin marked red on the displays bar clears the red.
- Alarm list cleaned up when a block is deleted, stopping crashes.
- Update from library refreshes correctly.
- "Clear active" option enabled for menus in display bar.
- Saving a new block to the library populates the name in the save dialog.
- Units propagation/checking extended to cover more complex cases.

- Fix crash after delete/add blocks
 - Alarms synced during update from library
 - Fix possible invalid displays IDENT field
 - Various other bugfixes.
-
-

4v6r0 to 4r6964

New Features/Mods:

- Languages save to library blocks.
- Language import/export implemented at block level.

Fixes:

- No Changes
-
-

4v5r0 to 4v6r0

New Features/Mods:

- Save/link to library separated out on menus.
- Blocks show L for linked to library but no file.
- Save/link/unlink from library on locked blocks doesn't need the password.
- Copy Serial Number To Clipboard button added to about box.
- Add ability to drag input/output pins
- Add "Visible" pin to Reports bar.
- "Clear" buttons added to report Visible and Trigger pins
- "Code differs" message added
- Load/Save referenced tables along with commsblocks.

Fixes:

- Alarm list cleaned up when a block is deleted.
 - Update from library refreshes correctly.
 - Clear active enabled for menus in display bar.
 - Saving a new block to the library populates the name in the save dialog.
 - Units propagation/checking extended to cover more complex cases.
 - Fix crash after delete/add blocks
 - Alarms synced during update from library
 - Fix possible invalid displays IDENT field
-
-

4v4r0 to 4v5r0

New Features/Mods:

- Edit/Validate implemented to produce a report of initially:
 - Bad display refs
 - Bad report refs
 - Bad datamap refs
 - Units conflicts
 - Bad dynamic ADP/UNITS/ALARMS refs
 - Codeblock build errors
 - Blocks out of sync (Warning)
- Properties bar will manage passwords for blocks.
- Remove Library link added to popup for blocks.
- Workspace bar refresh optimised.
- Display bar refresh optimised.
- Comparison Report added for codeblock code.
- VCC_XXXSELECT pins (e.g. UNITS, ADP and ALARM) now show base alias (if present).

Fixes:

- Creating a pin marked red on the displays bar clears the red.
 - Renaming a pin/block updates placement actives on the reports.
 - Remote debug fixed for large data size systems.
 - Minor resource leak on display import fixed.
 - Rebuilding a codeblock could cause a crash at some point later if the pins are identified or viewed in the object explorer. This is fixed.
-

4v1r0 to 4v4r0

New Features/Mods:

- View Alarm/Data connections removed.
- Alarm groups implemented.
- Bad language references cleaned up at save time.
- Next pinid saved in app file.
- Alarm list rebuilt after a paste.
- System screens now support "write level" and "read only"
- Changing target in properties maintains pin ids if necessary. (BUGZ 901)

Fixes:

- Update target template refresh issue with i/o pins on displays fixed.
 - Table editor crashes fixed.
 - Datamap format dropdown fixed.
 - Changing field using table dropdown in dataset bar fixed.
 - Pasting multi-line text into the report editor maintains style sync. (BUGZ 867)
 - Undo/Redo problems with styles in report editor fixed. (BUGZ 872)
 - Table import fixed if no alias present. (BUGZ 896)
 - Adding a table ensures the action buttons are disabled correctly.
-

4v0 to 4v1r0

New Features/Mods:

- Placements support bold/underline in the report editor.
- Application compression support.

Fixes:

- Copy/paste of styled report text implemented/fixed.
 - Report editor popup menu bold/underline indication improved.
 - Report/alarm history items in remote debug show correct time when offset is set.
 - Pasting blocks assigns new pinids. (BUGZ 886)
 - Fixed a column sort crash in the app explorer when a corrupt app is present.
 - Workspace bar crash after removing and adding blocks fixed.
-

3vXrY to 4v0

New Features/Mods:

- Setups made more flexible and manageable and renamed to Datasets.
- Historical data expanded into 3 sections.
- Some C||Cure warnings implemented. Navigation enabled from console into code.
- Active value state shown in bars when running.
- Groups shown in object explorer.
- asin/acos/atan/atan2/sqrt/sinh/cosh/tanh added to C||Cure.
- App Browser added.
- Library files checksummed.
- Displays/Reports bars retain deleted pin references.
- Support for multiple languages added.
- Style support added to report editor.
- Language export/import reworked to new format. Options offered on export.
- "case" statements expect constant expressions to fit in with standard C/C++.
- Duplicate case expressions in switch statements flagged as errors.
- Installing an app just installs the selected setup.
- Editing an integer pin value validates your entry and marks the box as red and disables the OK button if invalid.
- "Reset to 0" changed to "Reset to X" and "Reset Value" added to pin properties and app file.

Fixes:

- Historical trigger respects "Full Pin Paths" option.
- Unwrapping a pin does not make vccure think it's been deleted and remove links and references to it.
- Navigating using the path entry respects security of locked blocks.
- Report &'s fixed and placements realigned
- Support CRLF / LF / CR text endings when importing aliases
- Report editor SHIFT/CTRL placement selection fixed.
- Import/Export language doesn't change the app save folder.
- Language Grid (and all other grids) supports Unicode strings in the header.
- Integer arithmetic fixed in the C||Cure.
- Historical pin references loaded correctly.
- In use dynamic references no longer saved to the library.
- Editing an integer pin value allows you to enter the '-' sign.
- Units dropdown shows aliases if selected.
- Variable ADP display fixed.
- Enter value allows -ve exponents. Other invalid cases detected.
- Displays bar edits disabled in remote debug.
- Spin controls in the version dialog work the correct way around now.
- Persistent container outputs show correct values now.
- Refresh marks all machines as not seen and waits for replies to come back before marking them seen again.