

# AreaList Pro

## Version 9.1

### Release notes

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### System requirements

AreaList Pro version 9.1 is compatible with 4th Dimension v11, v12, v13 and above, for both Macintosh and Windows.

It requires MacOS X 10.5 or higher and Windows XP SP2 or better.

### Version 9.1 - New features

- Updated Advanced Properties Dialog with brand new RGB color management for all area parts
- Added checkmark for current value in popup menus
- Added 8<sup>th</sup> color for Date popup (ALP\_Area\_CalendarColors): it is used as background color; it has to have non-zero alpha channel to be used
- Slightly modified Date popup (added popup indicators, background rectangle for coloring, fixed year popup)
- Changed behavior on click into popup icon - selection is not changed if that cell is already selected
- Changed behavior for entry click in checkbox cell: for Boolean columns having ALP\_Column\_EntryControl set to 0 ("checkbox without title") and ALP\_Column\_DisplayControl set to one of the checkbox variants (0-2), the cell is not tabable and the entry click is handled as toggle (without tracking the [nonexistent] checkbox control)
- New selectors for scrolling: they are similar to ALP\_XXX\_Reveal, but instead of making sure that the requested object is visible, it is positioned to the top/left (when possible)
  - property name: ALP\_Column\_ScrollTo, ALP\_Row\_ScrollTo and ALP\_Cell\_ScrollTo
  - property value: "scto"
  - property is write only (it is just a message for ALP)
  - property type: n/a - no value is expected
  - usage: make the requested object positioned at top/left
- Date & Time popups are no longer application-modal - deactivating the window means cancel
- Implemented support for ALP\_Area\_EntryAllowArrows

- New area property:
  - property name: ALP\_Area\_SelNoCtrlSelect
  - property value: "selX"
  - XML attribute name: "noCtrlSelect"
  - property is read/write/persistent
  - property type: Boolean
  - default value: False
  - usage: if set, ctrl-click on an unselected row will do nothing. Otherwise the clicked row is made selected. In both cases the 'AL Single Control Click' event is reported
- New area property:
  - property name: ALP\_Area\_Self
  - property value: "self"
  - property is read-only
  - property type: pointer
  - usage: pointer to the area object  
 C\_POINTER(\$ptr)  
 \$err:=AL\_GetAreaPtrProperty (\$area;ALP\_Area\_Self;->\$ptr)
- Modified alternate row coloring - cell's background color is set as defined (from cell, row or column), then is combined with the alternate row color in case this other color is defined
- New three-state checkbox display/entry for integer columns
  - column has to be of type Integer or Longint (not formatted as time)
  - column has to use checkbox for display (ALP\_Column\_DisplayControl equal to 0, 1 or 2 (default is -1))
  - column has to use checkbox for Boolean entry (ALP\_Column\_EntryControl equal to 0 or 1 (default is 0))
    - if entry control is set to 0 (checkbox w/o title), two state entry is allowed
    - if entry control is set to 1 (checkbox with title), three state entry is allowed
    - ==> the entry control is never instantiated, change is immediate (on entry click)
- New cell property:
  - property name: ALP\_Cell\_Invisible
  - property value: "visi"
  - property is read/write/persistent
  - property type: Boolean
  - default: False
  - usage: if set to true, cell content is made invisible
  - comments: invisible cells draw nothing (except borders and disclosure triangle), are implicitly not enterable and are not copied when using Copy or Drag
- Possibility to scroll columns not by pixels, but by whole columns (ala Excel or ALP 8.x)
- Persistency for default column properties in Advanced Properties

- New area property:
  - property name: ALP\_Area\_ScrollColumns
  - property value: "scco"
  - XML attribute name: "scrollColumns"
  - property is read/write/persistent
  - property type: Boolean
  - default: False
  - usage: if set to true, horizontal scrolling is done in number of columns, not in pixels
  - comments: automatically set to true when compatibility is turned on
  - ==> this implies change in behavior of ALP\_Area\_ScrollLeft - pixels vs. columns - see the updated manual
- License dialog title is now "Product Version", e.g. "Arealist Pro 9.1"
- Changed drawing implementation on Windows - using GDI instead of GDIPlus if set by developer, default is GDI+
- New area property (Windows only):
  - category: Plugin
  - property name: ALP\_Area\_WindowsText
  - property value: "DIEN"
  - property is read/write, but not persistent
  - property type: Boolean
  - default: False
  - usage: change the engine used for drawing on Windows
  - if set to true, GDI drawing will be used; GDI+ otherwise
  - comments: newly created areas will use this engine

Note:

  - GDI: better rendering, no transparency, no horizontal scaling, limited text rotation features
  - GDI+: allows the three features above, but may affect precise rendering on Windows
- Modified area property ALP\_Area\_AltRowOptions:
  - mixed colors drawing can be activated by bit 3 in ALP\_Area\_AltRowOptions (mixing alt-row-color with cell color)
  - if bit 3 is set to 0 (default), then pre-9.1 (compatible) drawing is used (use cell's color if defined, not alt-row-color)
- New "Save 4D code to clipboard" option in advanced properties
- New popup icon for Windows - it is now 7 pixels wide, not 5
- When compatibility mode is turned on, ALP\_Area\_SelNoCtrlSelect is turned on, too
- Modified column scrolling during drag operation when ALP\_Area\_ScrollColumns is on

- Implemented support for the hidden `AL_UpdateArrays` feature that existed in ancient ALP versions using non-negative parameter (number of rows to show)
  - ALP 9 uses a new property - `ALP_Area_LimitRows` - for this implementation
  - `ALP_Area_LimitRows` is usable with selections, too
  - NOTE: it is not fully compatible with ALP 8 - when sort is done by ALP, the result is different
    - ALP 8 sorts the arrays, then accesses the first N rows
    - ALP 9 sorts only the first N rows
- New area property:
  - category: Display
  - property name: `ALP_Area_LimitRows`
  - property value: "limR"
  - property is read/write, but not persistent
  - property type: int
  - default: -1
  - usage: limit the number of rows to display ("shrink" selection)
  - use -1 to use actual array/selection size
- Widened column-resize area to 5 pixels
- New area property:
  - category: Selection
  - property name: `ALP_Area_SelNoAutoSelect`
  - property value: "selA"
  - XML attribute name: "noAutoSelect"
  - property is read/write/persistent
  - property type: Boolean
  - default: False
  - usage: if set to true, a click on a popup in an unselected row does not select the row
  - comments: automatically set to true when compatibility mode is turned on

### Version 9.1r2 - New features

- New constant for `AL_GetObjects/AL_SetObjects`:
  - constant name: `ALP_Object_RowSelection`
  - constant value: "ROWS"
  - array type: Longint
  - usage: when displaying records in row selection mode, get record numbers of selected rows/set selection using record numbers
  - comments: this can be time-consuming for big selections, especially on client/server

- New area property:
  - category: Selection
  - property name: ALP\_Area\_SelPreserve
  - property value: "selP"
  - XML attribute name: "preserve"
  - property is read/write/persistent
  - property type: Boolean
  - default: False
  - usage: Preserve row selection when sorting 4D's selection of rows
  - comments: this can be time-consuming for big selections, especially on client/server
  - IOW: if set to true and area is in fields mode, row selection will be restored after sort
- Type-ahead can be used on any kind of column except picture
  - integer, long and real columns are searched using numeric value
  - all other columns are searched using formatted value (e.g. for date column it has to be using yyyy/mm/dd to be usable)

### Version 9.1 - Fixes

- Fixed ALP\_Column\_Visible and ALP\_Column\_Locked of all columns when setting grid using AL\_SetObjects with ALP\_Object\_Grid
- Fixed AL\_SetScroll compatibility
- Fixed AL\_GetScroll compatibility (it was returning ALP\_Area\_ScrollLeft, now it returns what is expected by v8.x users)
- Fixed AL\_SetHeight and AL\_SetMinRowHeigh compatibility (action was not taken immediately)
- Fixed ALP\_Area\_ClearCache not to check for array/selection size
- Fixed ALP\_Area\_UpdateData to honor ALP\_Area\_SortDuring
- Fixed AL\_ColorPicker on Windows (was not setting alpha to 255)
- Fixed ALP\_Area\_CallbackMethEntryStart callback execution to be compatible with v8.x: 2 arguments in Arrays mode, 3 arguments in Fields mode
- Fixed string comparison, which had become case sensitive on Mac: "Black" = "black" again
- Fixed crash in AL\_SetObjects with selectors ALP\_Area\_HeaderText and ALP\_Area\_Footer\_Text
- Fixed background color handling for Date popup (AL\_Area\_CalendarColor usage)
- Fixed scrollbar position on Windows when ALP area is resized due to move of a splitter
- Fixed AL\_SetScroll when called in On Load
- Fixed license dialog title (it is the product name again, not "License expired")

- Fixed DisplayList window sizing
- Fixed enterability by popup (area had to be enterable by click)
- Improved drawing on Windows
- Fixed drawing of text with horizontal scaling value 1.0
- Modified internal caching of styles (caching native font instances should speed up drawing)
- Fixed scrollbars on Windows (sometimes dimmed until clicked)
- Changed checkbox title to the first part of the ALP\_Column\_Format when Boolean entry is made (ALP\_Column\_DisplayControl = -1 or 3, ALP\_ColumnEntryControl = 1)
- Fixed DisplayList centering on screen
- Fixed AttributedText editing
- Added workaround for bug in 4D v13b2 (always setting event time to zero) - double-click on Mac should work again
- Fixed up-arrow-key and down-arrow-key navigation (single row selection mode, no row selected)
- Fixed crash when shrinking arrays/selection and a footer cell has set any property
- Fixed ALP\_Area\_SortDuring - crash when shrinking arrays, incorrect sorting when expanding arrays
- Added redraw after "select all"
- Slightly optimized column resizing (all columns do not have to be recalculated when fixed row height is used and last column is not auto-sized (ALP\_Area\_AutoSnapLastColumn))
- Entry is exited (as if user pressed ESC - EndEntry is called with reason=12) when application is deactivated and value was rejected by EndEntry callback
- When compatibility mode is turned on, ALP\_Area\_SelNoCtrlSelect is turned on, too
- Fixed row height calculation (after using AL\_SetHeight)
- Fixed AL\_SetHeight (zero value for padding was not accepted)
- Changed AL\_GetLastEvent (when called w/o valid area, AL\_ProEvt 4D variable was accessed - now the internal global variable is used)
- Fixed behavior for ALP\_Area\_EntryClick = 6 - control-double-click (control click was reported, entry was not started)
- Fixed event reporting on type-ahead navigation (event was not reported)
- Fixed AL\_SetLine - zero is allowed, no row will be selected (previously ALP\_Area\_SelNone was checked and if not allowed, this call was ignored)
- AL\_GetCellMod should now always return true for popup entry
- When ALP\_Area\_SelNoAutoSelect is not set and selection is changed by ALP, click is reported before BeginEntry

- When a click in a cell changes the selected row, this click is reported before BeginEntry/Drag/Click
  - note: 'click is reported' means: if an event callback is installed, the callback is executed *\_before\_* the other action (begin entry, begin drag), otherwise the area's object method is run *\_after\_* the other action with last event to be reported (e.g. click and drag -> only drag is reported)
- Fixed advanced properties dialog (default for new column was ALP\_Column\_DisplayControl = 0 -> checkbox for integer column)
- Fixed column dragging feedback (rectangle computation)
- Fixed column lock dragging feedback
- Windows only:
  - modified double-click detection (native max. distance is used (usually 3) instead of 1!)
  - fixed mouse tracking (user had to move the mouse at least 4 pixels to see any effect)
  - added workaround for [old] 4D bug when editing a cell (when user clicks into another object, ALP gets mouse-down event outside the ALP area instead of deselect event - now it is handled as exit cell (EndEntry callback is executed)
  - selected text uses native text color (as set in appearance preferences), not white
  - fixed mouse down event handling when entry is in progress - the click should not "disappear" (click any 4D object twice to get the click)
  - click on scrollbar makes the area selected
  - dragging rectangle is only framed on GDI (no transparency -> no fill)
  - fixed drawing of lines and rectangles in GDIPlus

### Version 9.1r1, r2 & r3 - Fixes

- Fixed automatic row dragging
- Fixed AL\_SetScroll during On Load (max. value for scroll was not tested - scrolling to last row would display just the last rows until first redraw)
- DisplayList
  - fixed GetListButton (actually button-click handling in dialog)
  - fixed DisplayList return value (first selected row is returned, under some circumstances it was +1)
  - double-click on a list item will end (accept) selection even in multi-line mode
  - when opening dialog, selected row is scrolled into view
  - DisplayList returns 1 if user double-clicked a list row, returns 0 if user clicked the cancel button
- Fixed AL\_GetCellLongProperty, AL\_GetCellRealProperty, AL\_GetCellTextProperty
- Fixed AL\_SetFields/AL\_InsertFields when creating first column and it is calculated one (setting ALP\_Area\_TableID implicitly before column addition)

- Fixed sorting:
  - if text column is attributed, only plain text is compared (e.g. "<SPAN STYLE='color:#0000FF'>red</SPAN>" is compared as "red")
  - after sort, selected row is scrolled into view
  - fixed type-ahead
  - if text column is attributed, only plain text is compared (e.g. typing "re" will match "<SPAN STYLE='color:#0000FF'>red</SPAN>")
  - same comparison is used as for sorting
- Advanced properties enhancements, e.g. no more checkbox display for new bool/int/long columns and improved "Save 4D code to Clipboard"
- Mac & Windows:
  - before starting entry when selection is changed (and ALP\_Area\_SelNoAutoSelect is 0), single click is reported (it reported double click for real double-clicks, e.g. entry on command-double click: ALP reported double click and then entry was started)
  - if column type was not text but popup array was of type text, lookup for value mapping failed (bad coercion from text to native column's type)
  - fixed AL\_GetObjects with ALP\_Object\_RowSelection (was not updating the 4D's array - never worked)
  - improved Drag&Drop - auto-drop (move column/row) not always executed in compatibility mode
- Windows:
  - after ending entry by clicking into active ALP, all following events were duplicated (click, key down...)
  - scrollbars sometimes not drawn correctly (e.g. inactive)
  - header height computation on Vista/Windows 7 should be more accurate

### Upgrading from previous versions

AreaList Pro version 9.1 is a free upgrade from v9.0: existing licenses will activate version 9.1.

- Upgrades from versions 8.3 - 8.5 (single user or server) are available at 50 EUR (\$65-\$70 USD) each
- Upgrades from versions 8.0 - 8.2 (single user or server) are available at 90 EUR (\$115-\$120 USD) each

Version 8.5 licenses acquired as of June 21<sup>st</sup>, 2011 are eligible to a free upgrade.

### Contact

Free upgrade requests, sales information: [sales10@e-node.net](mailto:sales10@e-node.net)

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