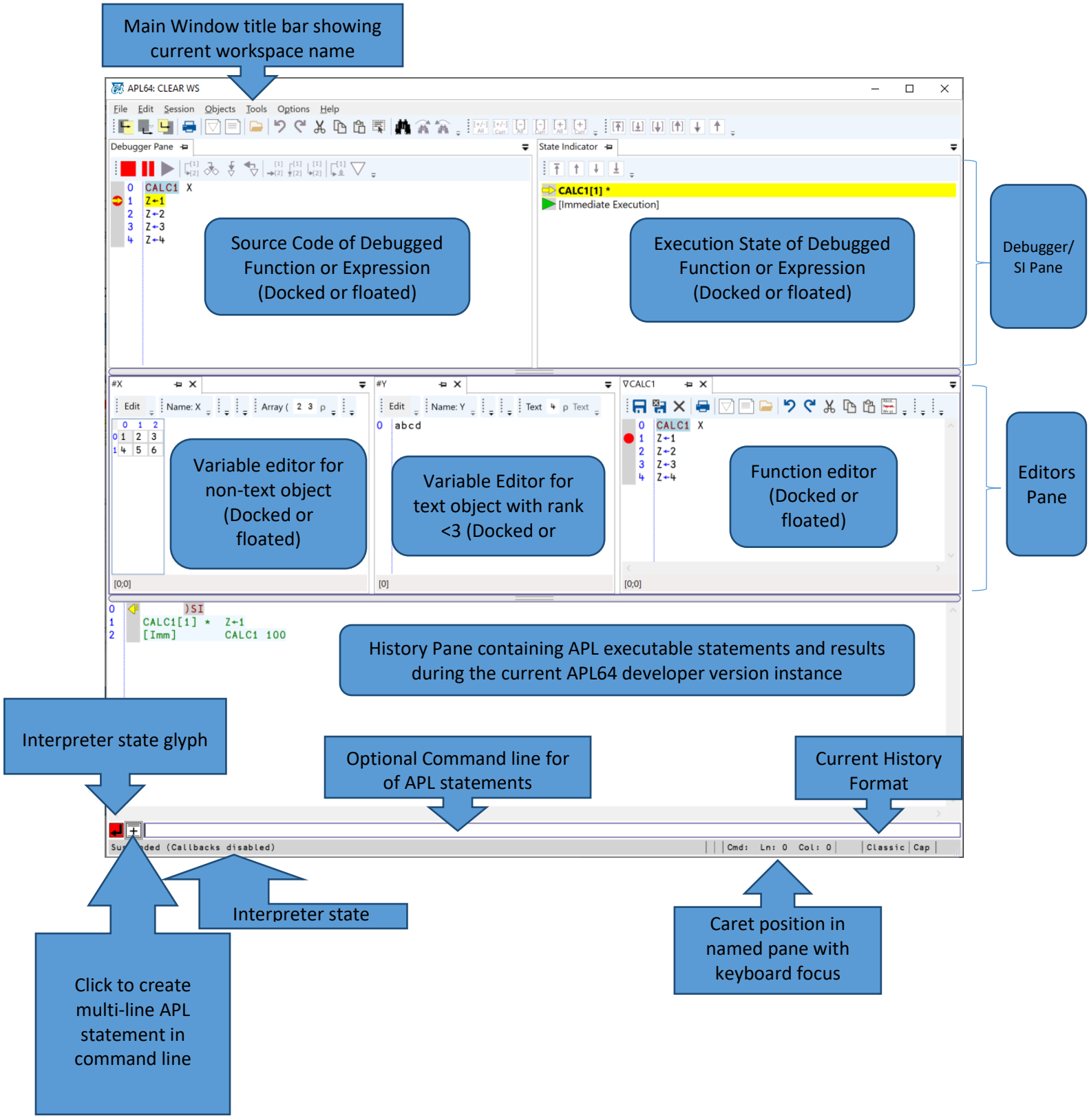
APL64 Developer GUI Quick Start

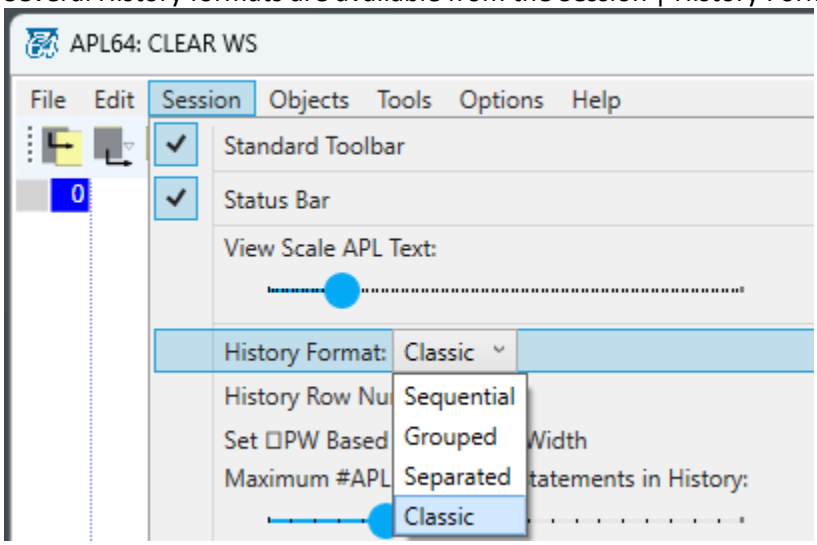


Contents

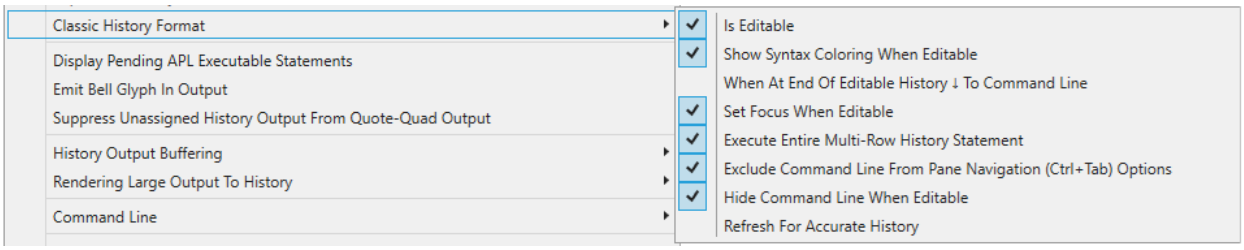
History Pane Formats 2
Tooltips 3
Valuetips 3
APL Executable Statements 3
Classic History Format 3
Text Selection 4
Debug & State Indicator 5
APL Object Editor 5
APL64 Function Editor 6
Excel Worksheet-Style Variable Editing 8
Floating / Docked Panes 9
Move to Selected Pane 11
Find / Replace 12
User Documentation 13
Keyboard Definition 13
Multi-line APL Executable Statements 14
Learn More 15

History Pane Formats

Several History formats are available from the Session | History Format menu:

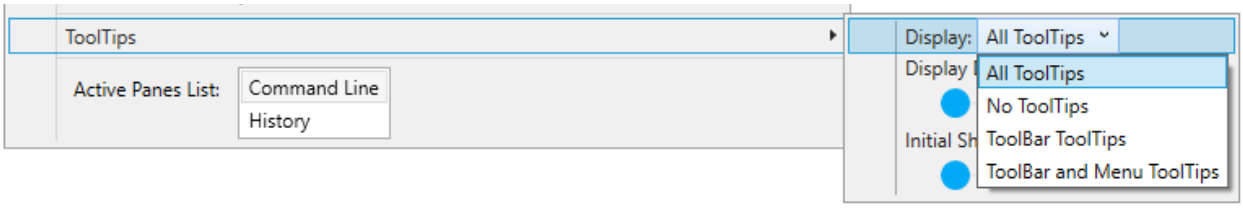


Each History format has options, e.g. for the Classic History Format:



Tooltips

Tooltips are available for most APL64 Developer version GUI controls. Hover the mouse over a GUI control to display the associated tooltip. Use the Session | Tooltips options to configure tooltip behavior.



Valuetips

Valuetips are available for APL64 objects which exist in the current workspace. Hover the mouse over an object name to view the associated valuetip.

APL Executable Statements

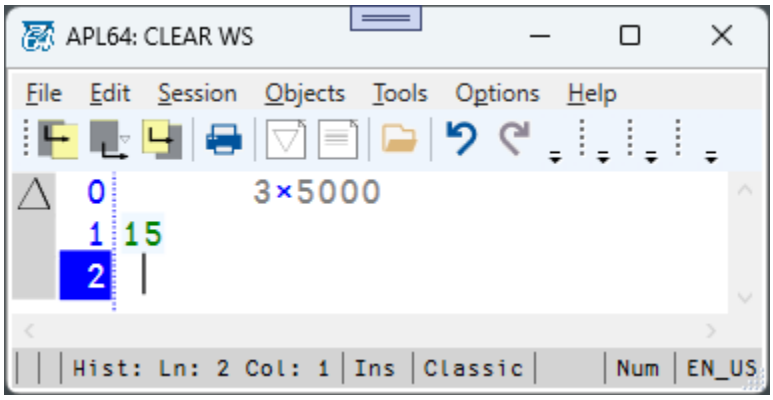
Enter APL executable statements into the History Pane or the optional Command Line. After an APL executable statement has been user-prepared, click the Enter key to execute that statement.

When the History pane has the keyboard focus and a selection of its content has been made:

- Click Enter to execute the selected text
- Click Shift+Enter to copy the selected text to the Command Line
- Click Backspace or Delete to copy the unselected text in the row(s) containing the selected text to the Command Line

Classic History Format

The Classic Format History pane can be configured to be editable (scratch-pad mode), so that the text of the history pane can be modified without executing APL statements. When the APL64 programmer modifies existing text in the editable Classic History Pane, the left margin 'changed' glyph (Δ) indicates lines with the changes which were not executed:



The 'scratch-pad' mode of the editable Classic History may not reflect the actual history of APL processing.

To restore the editable Classic History to reflect actual APL execution history:

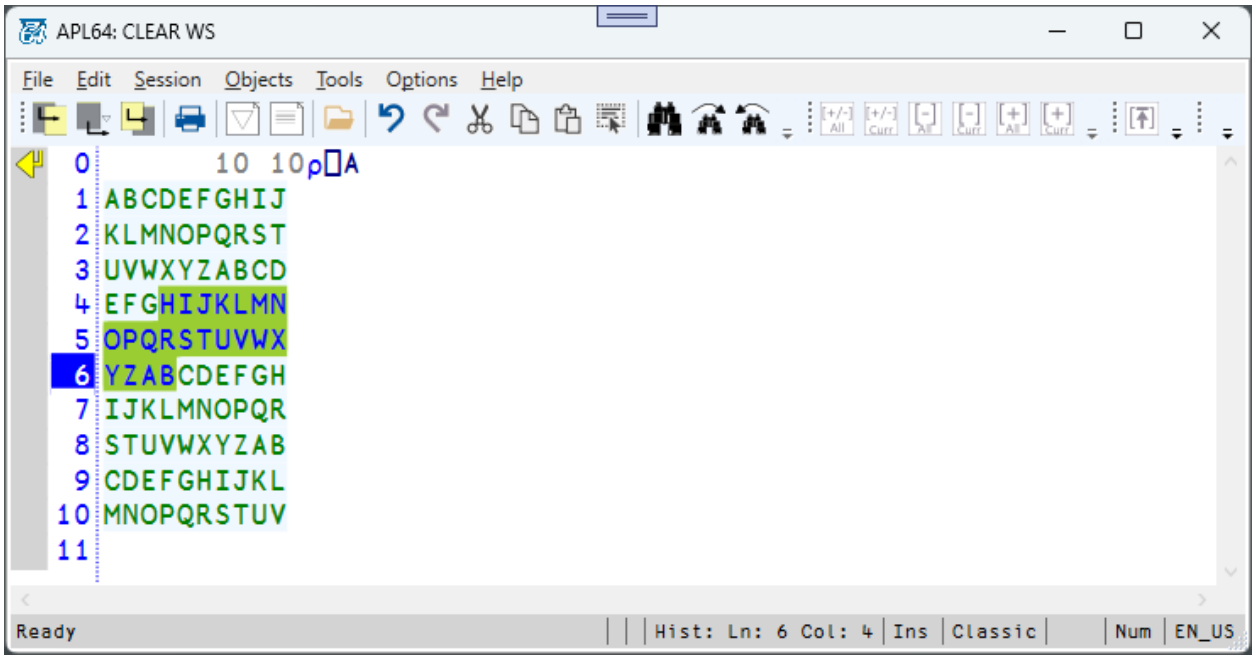
- Clear the history content using the Session | Clear History menu item
- Restore the actual history content using the Session | Restore History menu item

To scroll up the existing History content, use the Session | Scroll Up History menu item

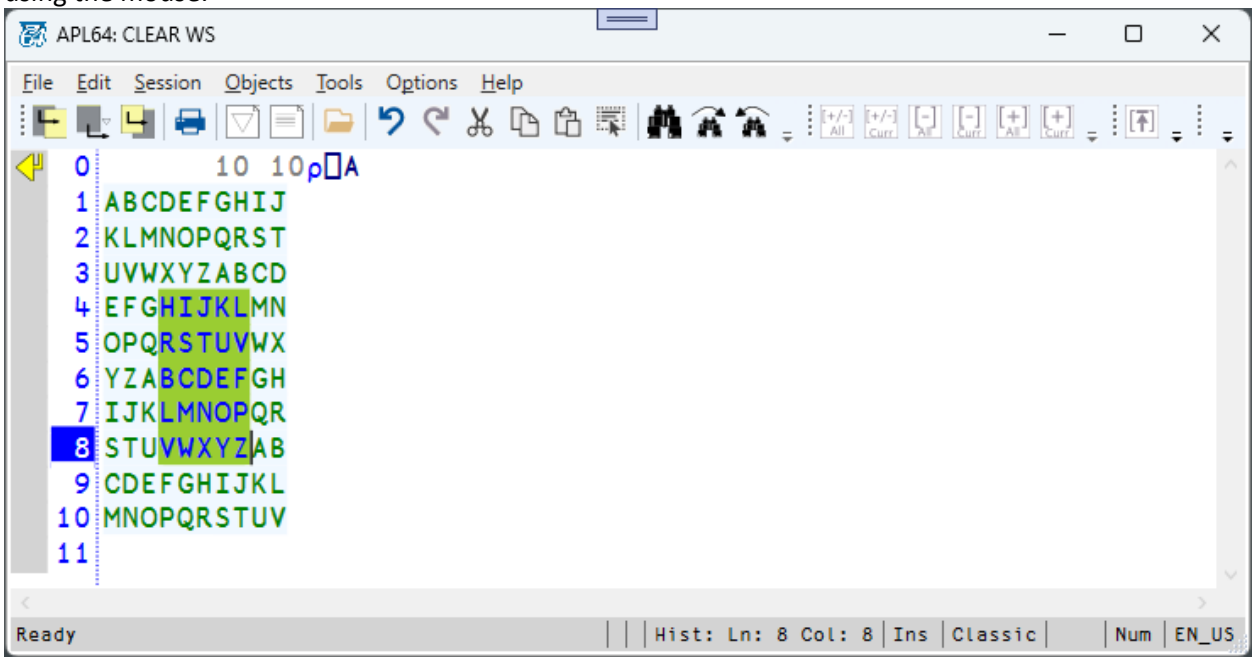
Text Selection

APL64 supports linear and rectangular select of text in the history pane, function editor, variable editor and command line.

Linear selections are made using the Shift and Key.Up, Key.Down, Key.Left or Key.Right or using the mouse:



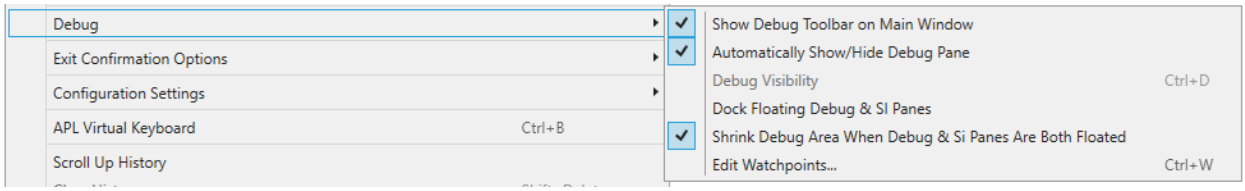
Rectilinear selections are made using the Alt+Shift and Key.Up, Key.Down, Key.Left or Key.Right or using the mouse:



Debug & State Indicator

The Debugger and State Indicator panes may be floated or docked.

The Debugger and State Indicator panes are automatically displayed or hidden depending on the current APL64 interpreter state. Other Debug options are available from the Session | Debug menu item:



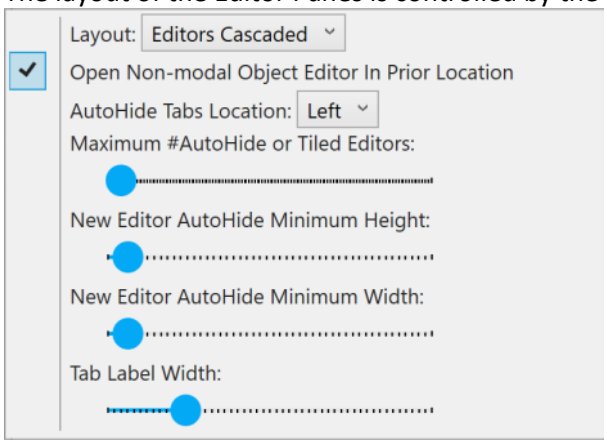
(SI) pane section of the main window and the remaining area of the main window are shared depending on the position of the GridSplitter Bar between these sections. Double-clicking the left mouse button on this GridSplitter Bar will alternately minimize/maximize the Debugger/SI pane section of the main Window. The user may manually drag this GridSplitter Bar to any intermediate position to share the space proportionally between the Debugger/SI panes and remaining area of the main window.

APL Object Editor

The APL64 object editor can edit any APL64 variable (except objects containing ⍬ or ⊂⍬) including those with:

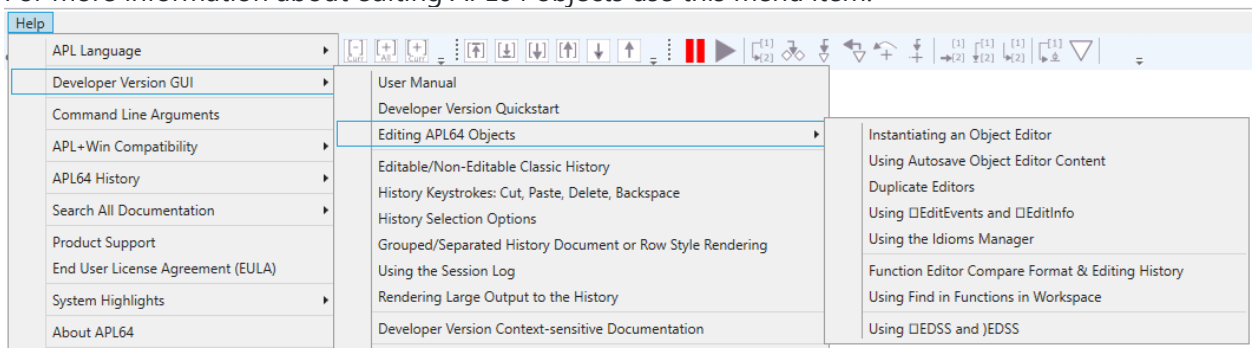
- Homogeneous or non-homogeneous element types
- Rank greater than two
- Nested variables

The layout of the Editor Panes is controlled by the Objects | Editors Pane Format:

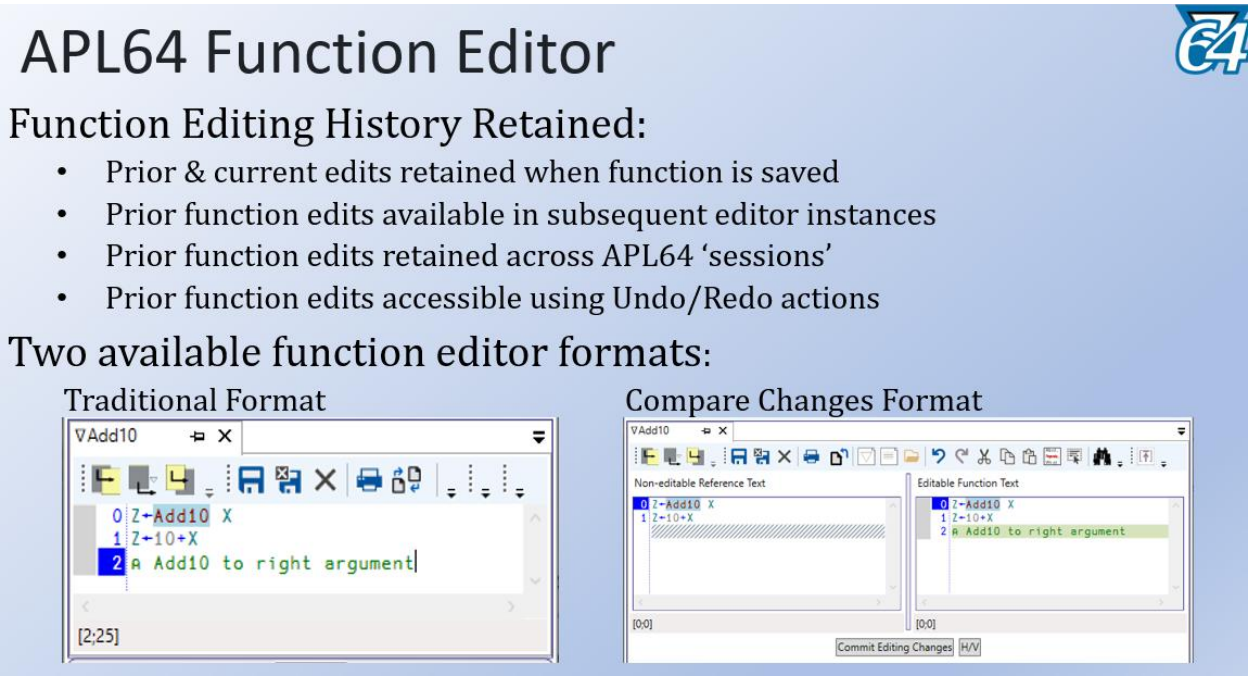


The Editors pane section of the main window and the History pane section of the main window are shared depending on the position of the GridSplitter Bar between these sections. Double-clicking the left mouse button on this GridSplitter Bar will alternately minimize/maximize the Editors pane section of the main Window. The user may manually drag this GridSplitter Bar to any intermediate position to share the space proportionally between the Editors pane and History pane sections of the main window.

For more information about editing APL64 objects use this menu item:

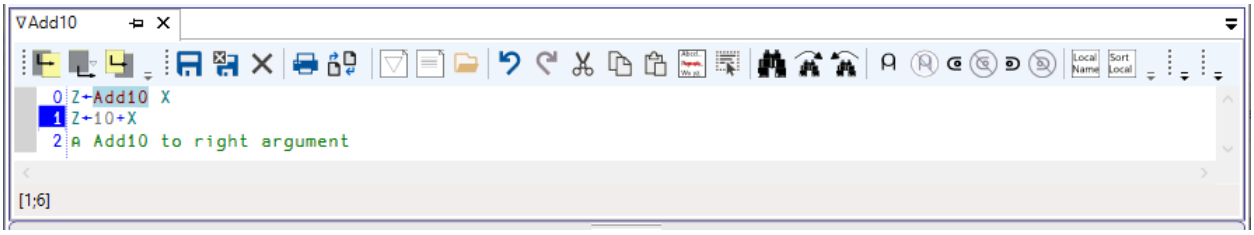


APL64 Function Editor

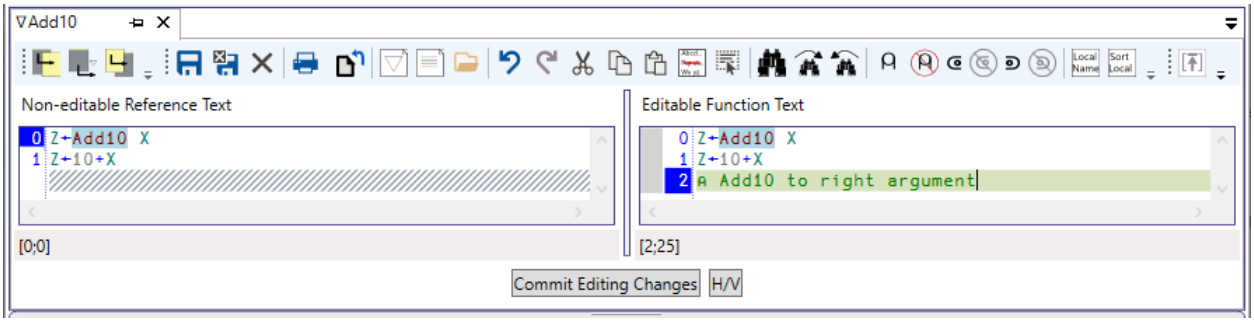


When editing an APL64 programmer-defined function, there are two editor formats available:

Traditional format illustrates the current edited text of the function:



Compare Format illustrates the reference text of the function since the most recent 'Commit Editing Changes' action and the current edited text of the function:



Function Editing Change Records

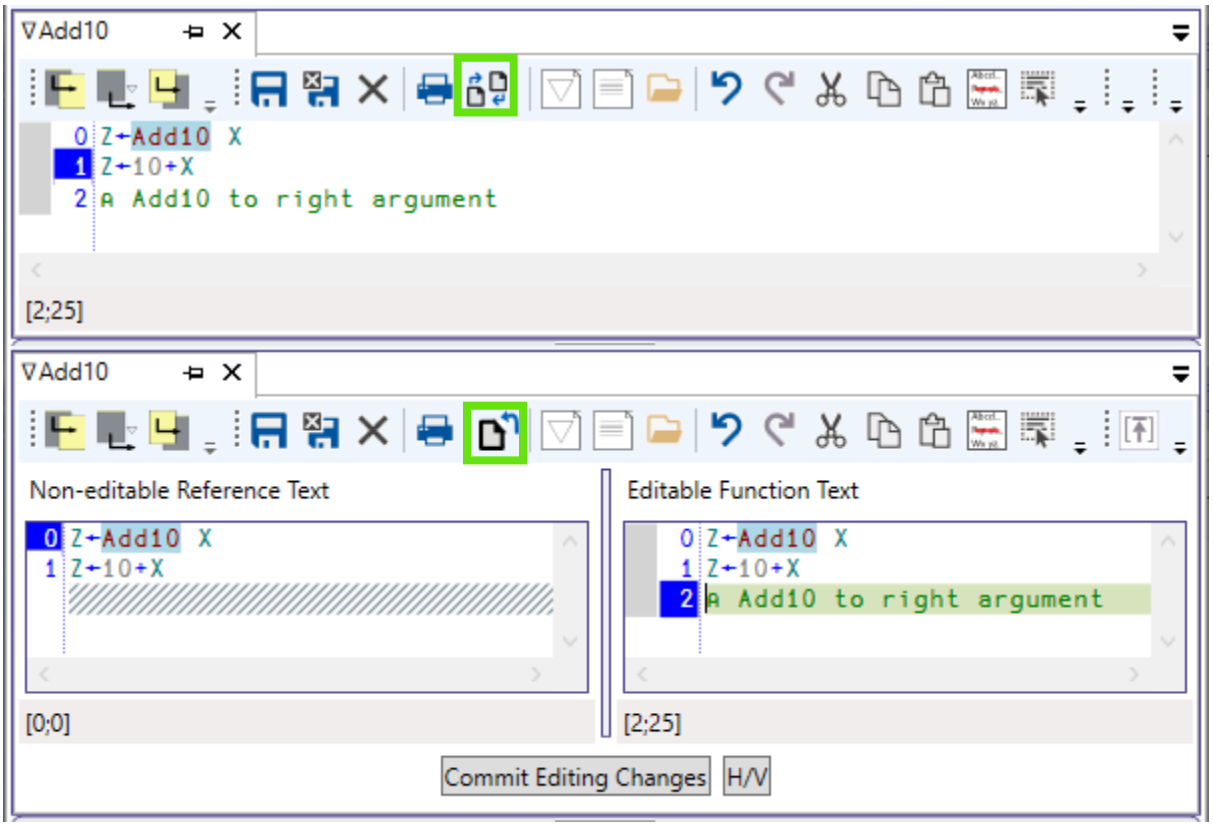
The function editing changes made by an APL64 programmer to an APL64 programmer-defined function are retained within the function definition when the function is saved in the workspace:

- The prior function editing change records are available via the Undo/Redo action when the function is subsequentially edited using the traditional or comparison format of the APL64 function editor.

- Function editing change records are retained from the initial function definition or the most recent ‘Commit Editing Changes’ action.
- Function editing change records are retained for subsequent APL64 developer version instances.

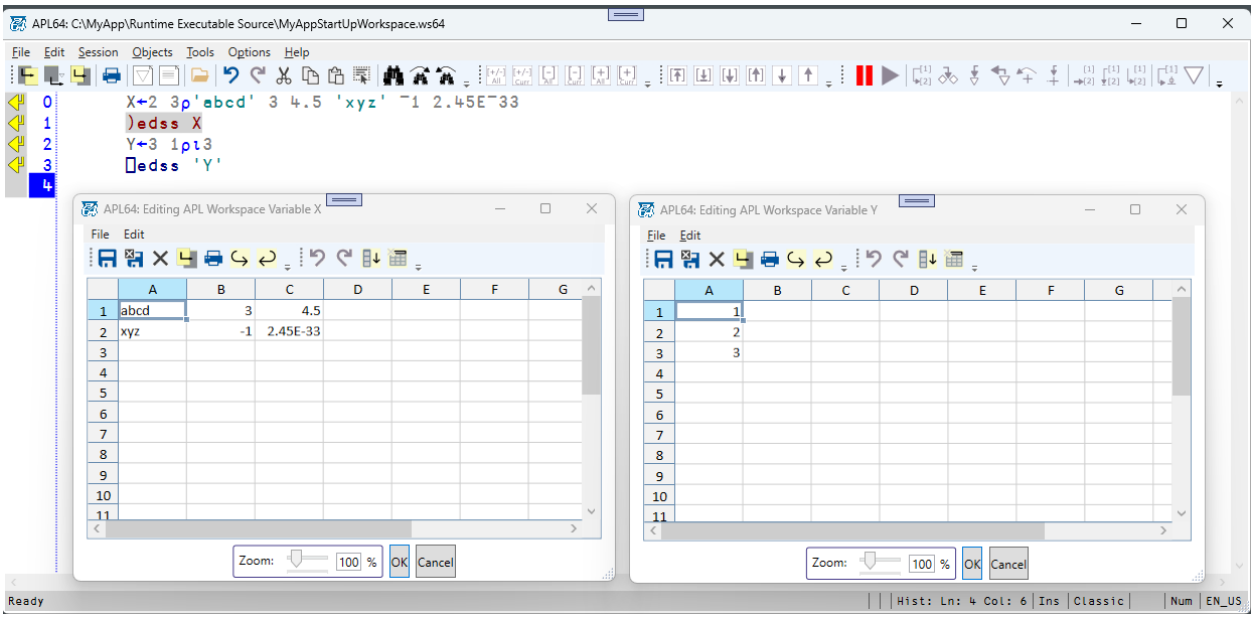
Selecting the Function Editor Format

The comparison and traditional function editor formats are selected when an APL64 programmer-defined function is edited in an APL64 developer version instance by clicking the editor format toggle button:



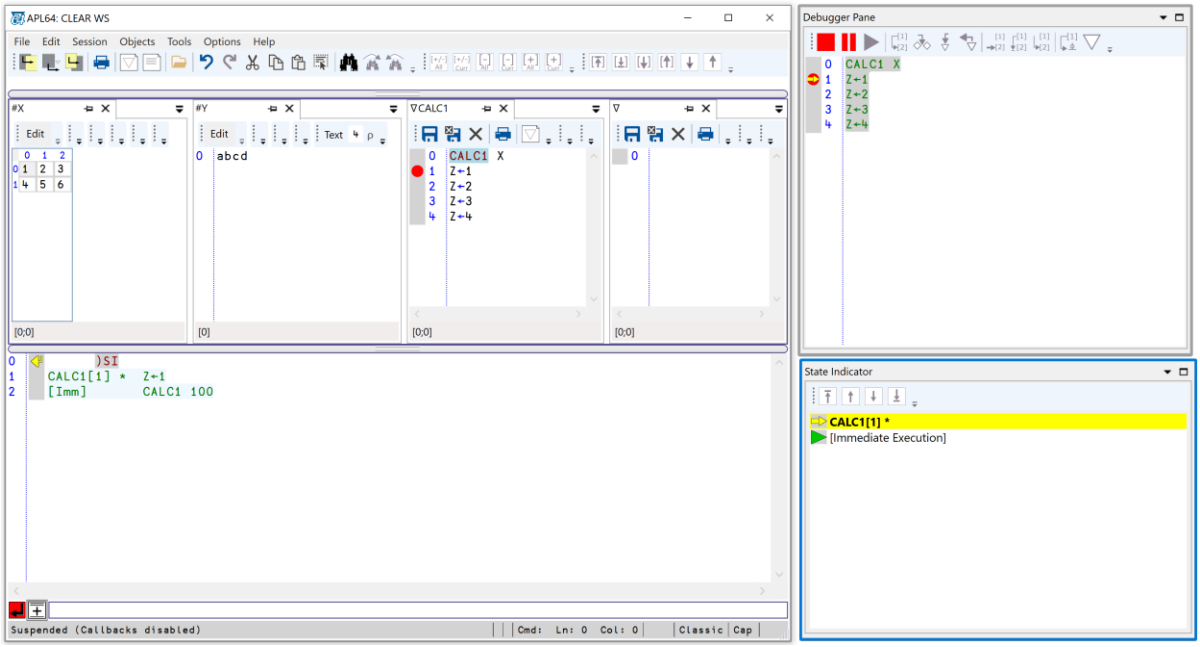
Excel Worksheet-Style Variable Editing

Use)edss or]edss to edit APL64 variables of rank less than three (3) in Excel worksheet-style:

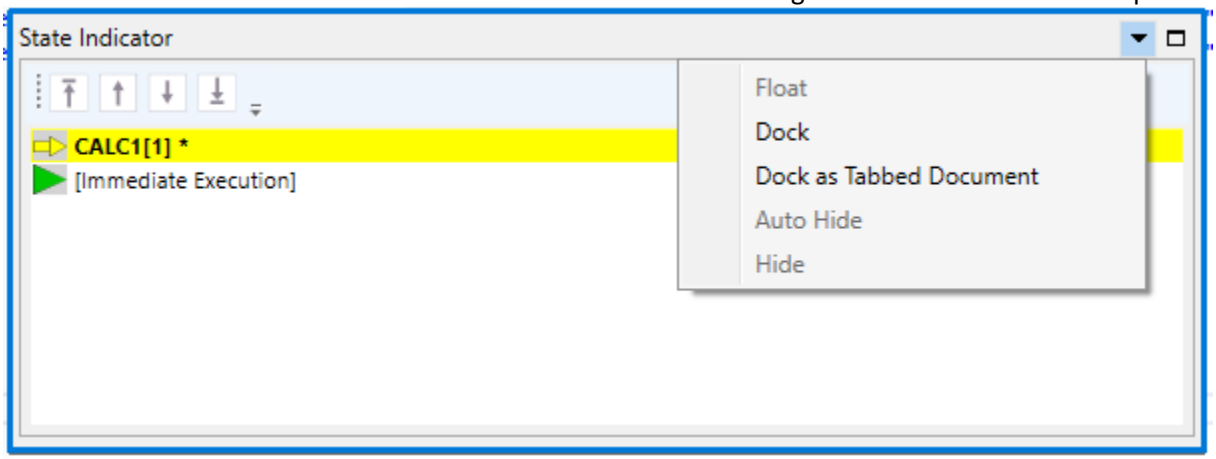


Floating / Docked Panes

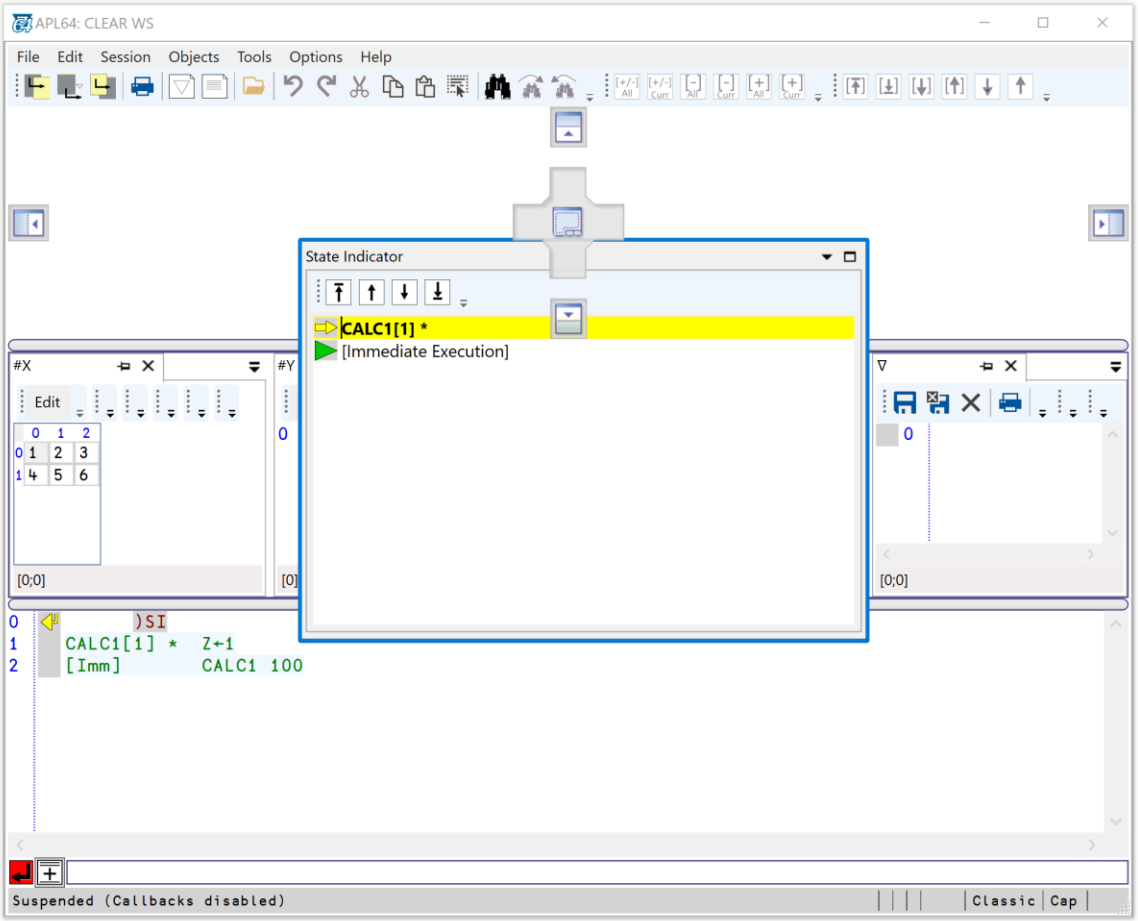
Float a function editor, variable editor, debugger or state indicator pane by dragging the pane's tab to the desired location with the left mouse button depressed.



A floating APL64 Developer version pane may be docked by using the pane's title bar options list to select a docking option:

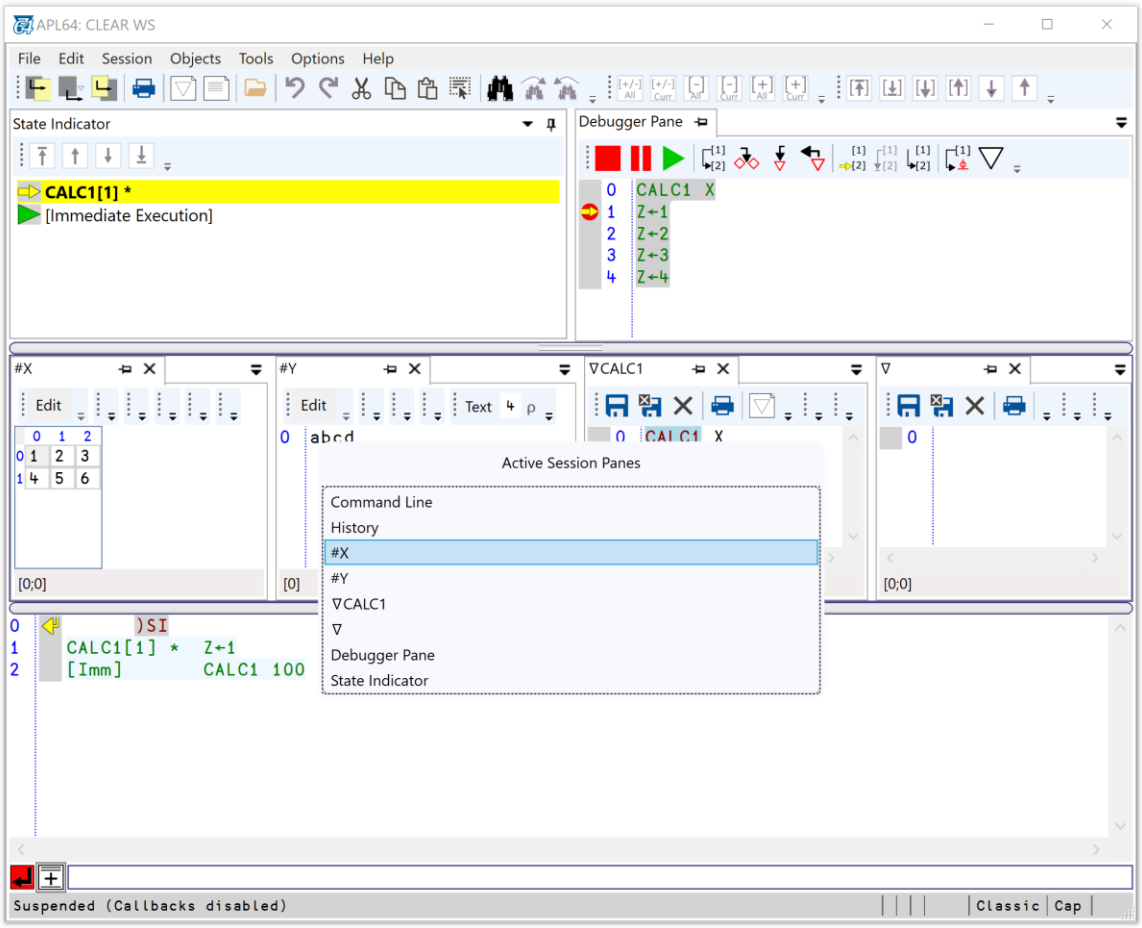


An APL64 Developer version floating pane may also be docked by dragging the pane's tab back to the editors pane section of the main window and dropping the pane onto a selected docking location:

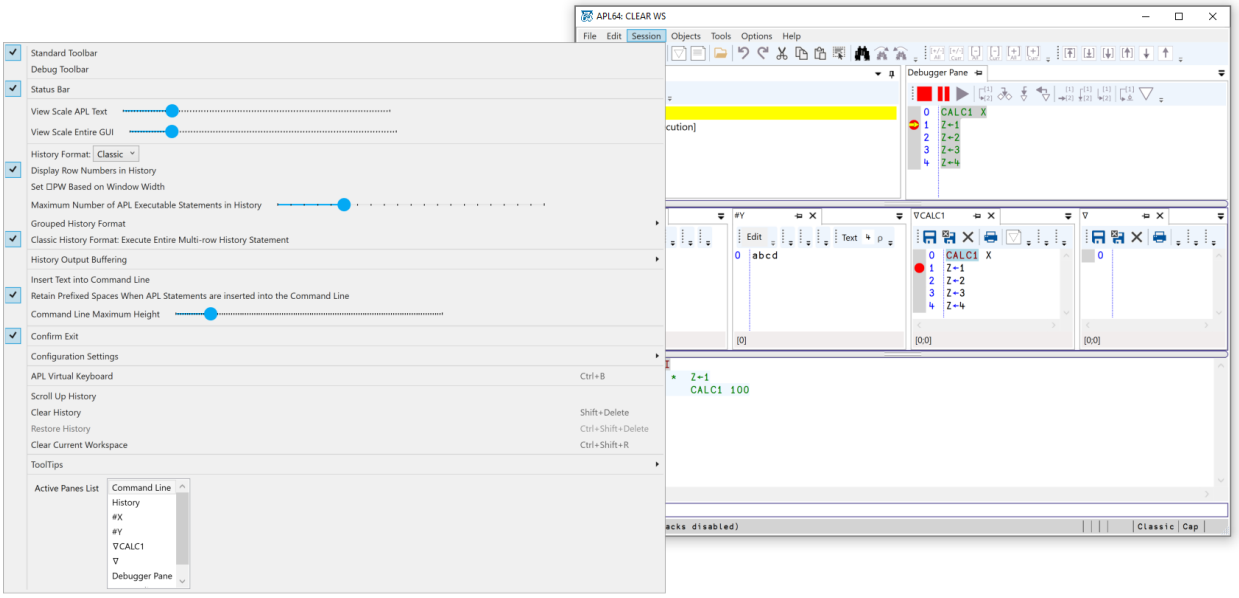


Move to Selected Pane

Use the Ctrl+Tab and Ctrl+Shift+Tab to move the keyboard focus to a different pane in the APL64 developer version:



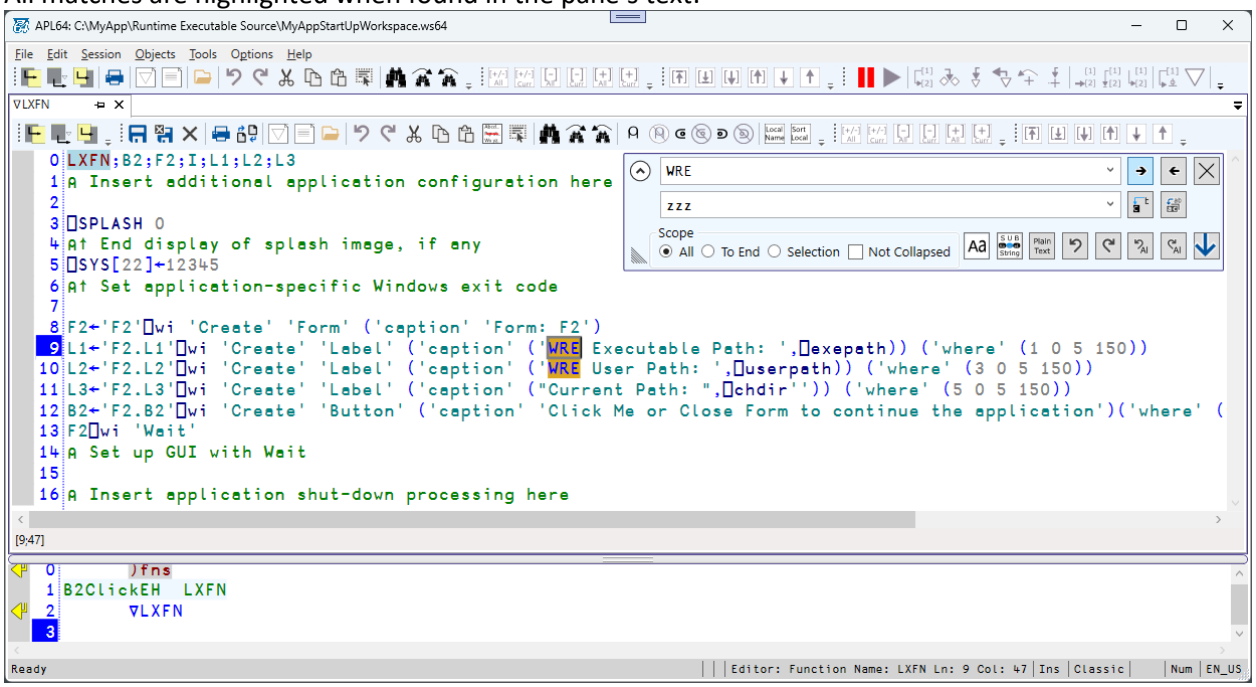
Select an available pane in the Session | Active Panes List to move the keyboard focus to a different pane:



Find / Replace

In APL64 the Find / Replace dialog is contained with the pane which had keyboard focus when the user clicked Ctrl+F or Ctrl+H, so that the Find/Replace dialog will remain associated with a floating pane. Clicking Ctrl+F or Ctrl+H when a different pane has the keyboard focus will remove the Find / Replace dialog from the prior pane and present the Find / Replace dialog it in the current pane.

All matches are highlighted when found in the pane's text:



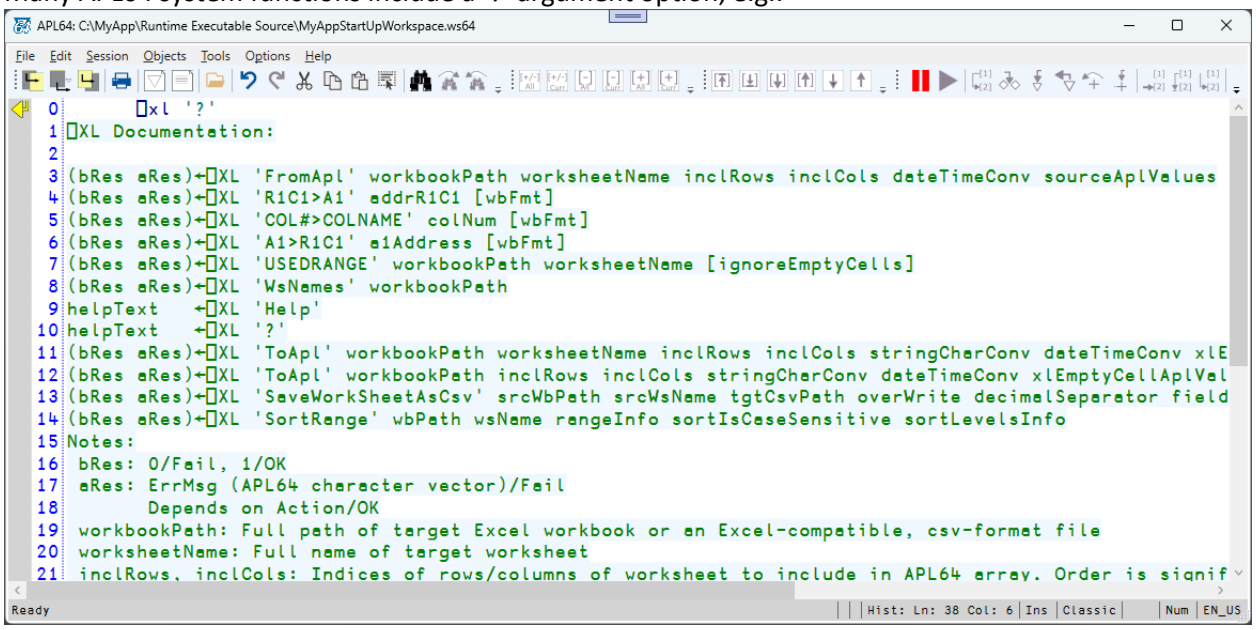
The 'case', 'substring', and 'plain text' buttons in the Find/Replace dialog are toggle buttons. Click them repeatedly to select the other options.

User Documentation

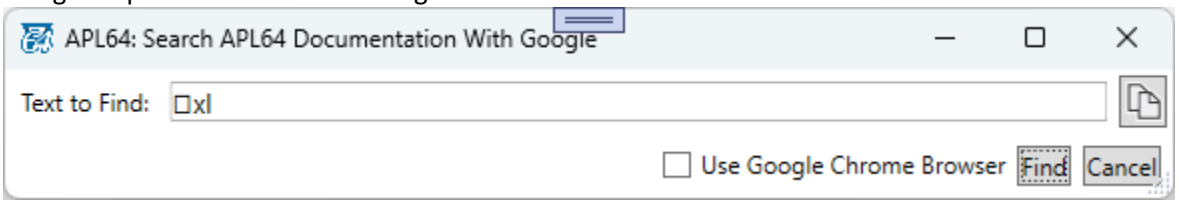
User documentation is directly available from the APL64 Developer GUI. Use the Help menu items to select comprehensive documentation of APL64 features.

For context-sensitive documentation of a particular APL64 element, e.g. an APL64 system function, place the caret immediately before a feature of interest or select a portion of the pane's content containing a feature of interest and click the F1 key. The applicable page of the APL64 pdf-format document documenting that 'feature of interest' will be displayed in the default browser.

Many APL64 system functions include a '?' argument option, e.g.:



All user documentation may be searched. APL64 User Documentation is maintained on-line. To search the on-line documentation use the Help | Search All Documentation | Search All Documentation with Google to present the search dialog:

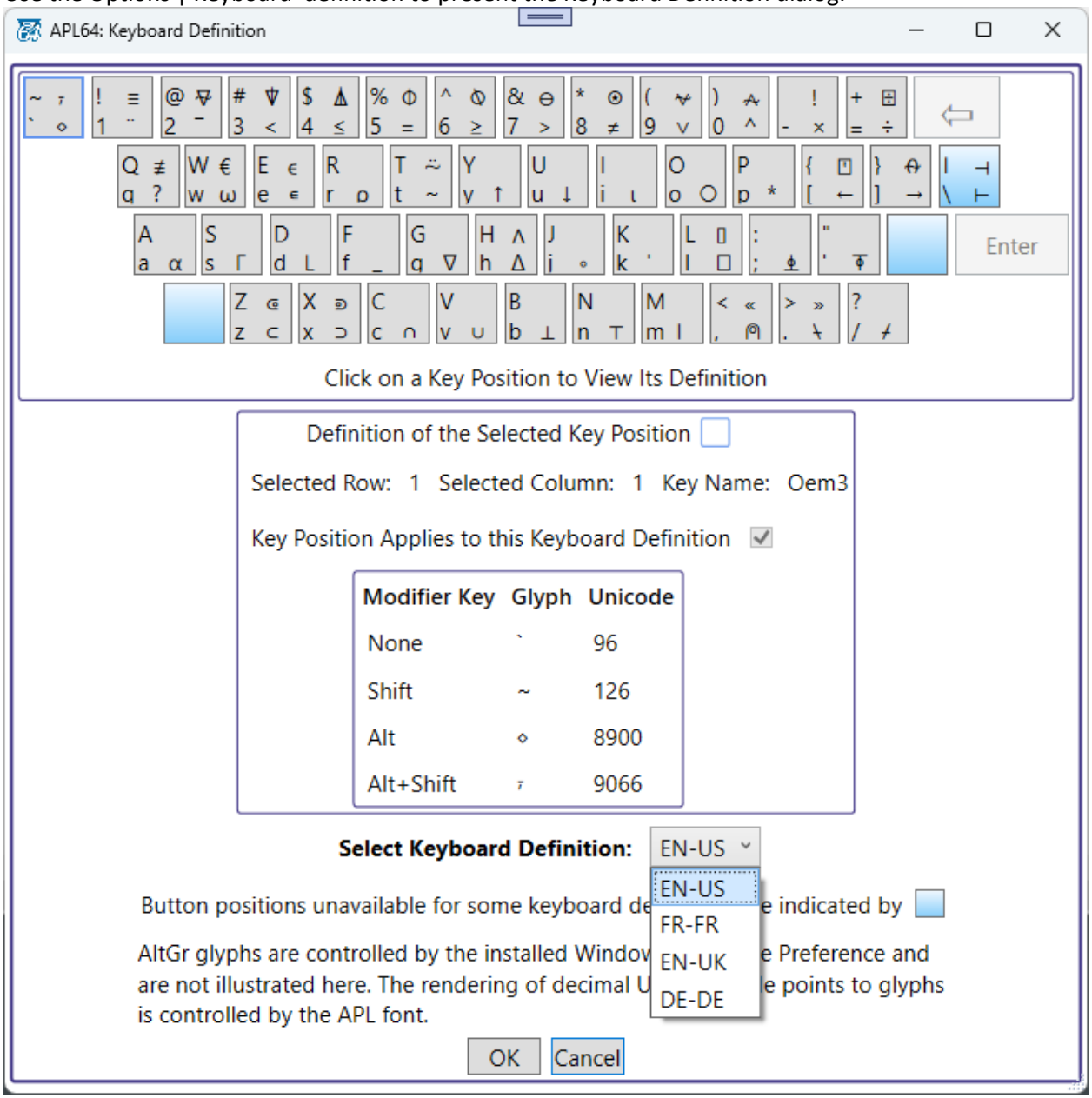


Enter the 'text to find' to open the default browser to the links in the APL64 user documentation identified by the Google search engine, and double left mouse click on the desired link.

Documentation can be downloaded and stored locally on the workstation. The locally-stored documentation may be searched by configuring Adobe Reader as described in the Help | Search All Documentation | Search All Documentation with Adobe.

Keyboard Definition

Use the Options | Keyboard definition to present the Keyboard Definition dialog:

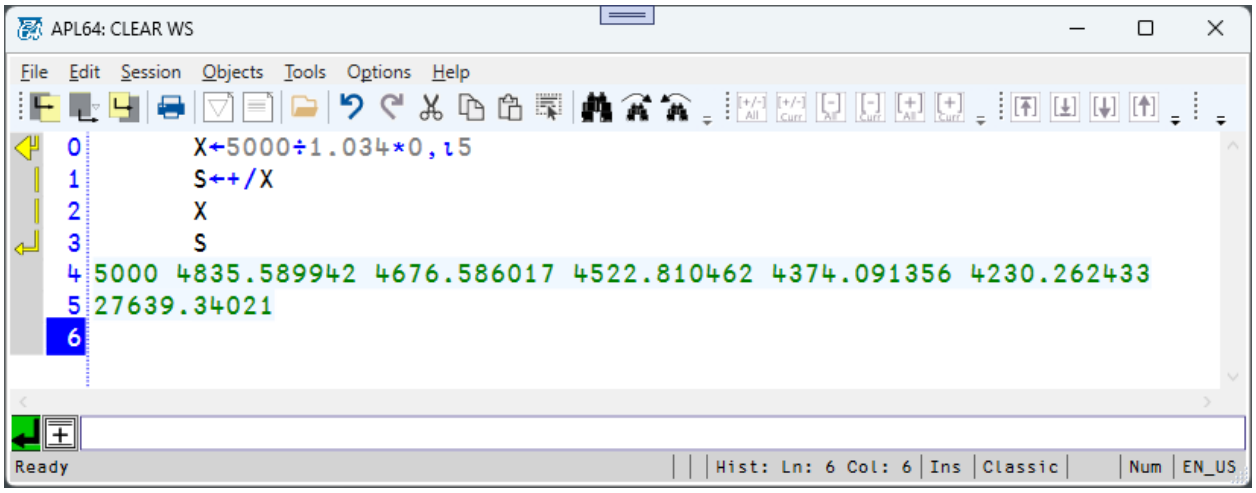


Review the Keyboard Definition user documentation from the Help | Developer Version GUI | Keyboard Definition menu item.

Multi-line APL Executable Statements

The optional Command Line supports multi-line APL executable statements. When the Command Line has the keyboard focus, use the Ctrl+Enter keystroke or click the New Row button to the left of the Command Line to add an additional line to the APL executable statement in the Command Line. If the caret is at the end of the text in the Command Line, the Key.Down keystroke will add an additional line to the APL executable statement in the Command Line.

The identification of executed multi-line APL statements in the History depends on the user-selected History format. For the Classic history format left margin 'execution' glyphs 'connect' the multi-line statements.



Learn More

To learn more about the APL64 Developer version GUI use the Help | Developer Version GUI menu item to read detailed documentation of APL64 features.