

APL64 Session – Keyboard Definition

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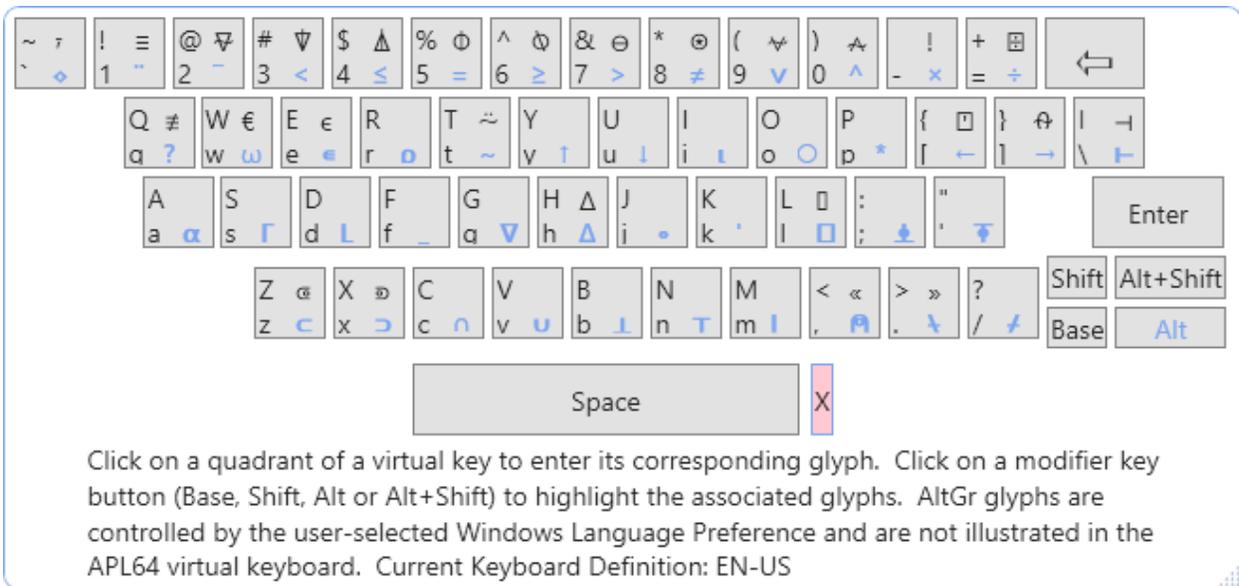
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Overview

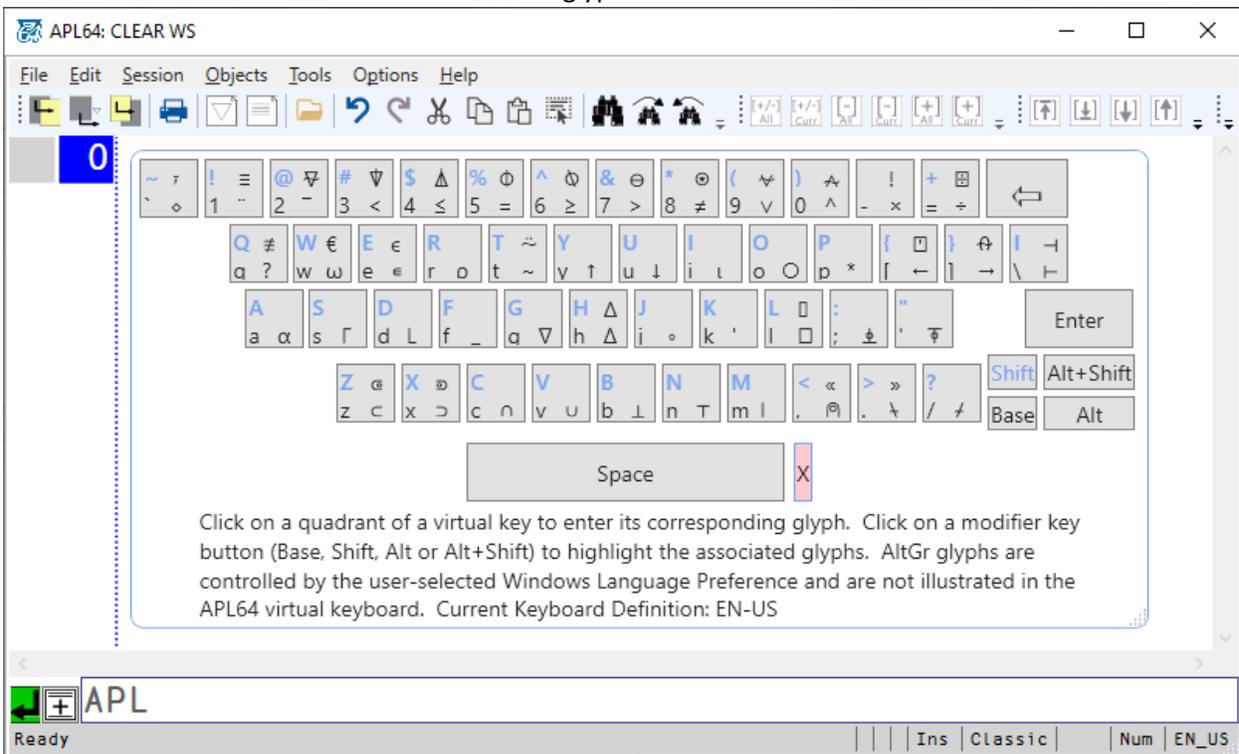
The APL64 keyboard definition is used by the APL64 session to display glyphs associated with the ‘Base’, ‘Shift’, ‘Alt’ and ‘Alt Shift’ modifier key states when physical keyboard keys are clicked by the user. The APL64 keyboard definition is also used by the APL64 session when the **Session | APL Virtual Keyboard** is visible.

In an instance of the APL64 Developer version use the **Session | APL Virtual Keyboard** menu item to show or hide the non-modal APL64 on-screen keyboard.

Each virtual key of the on-screen keyboard in APL64 has four quadrants representing the four modifier key states considered by the APL64 Developer version: Base (no Alt or Shift), Shift, Alt and Alt+Shift. When a quadrant of a virtual key of the on-screen keyboard in APL64 is clicked the corresponding glyph is entered into the text area of the GUI control which has the keyboard focus.



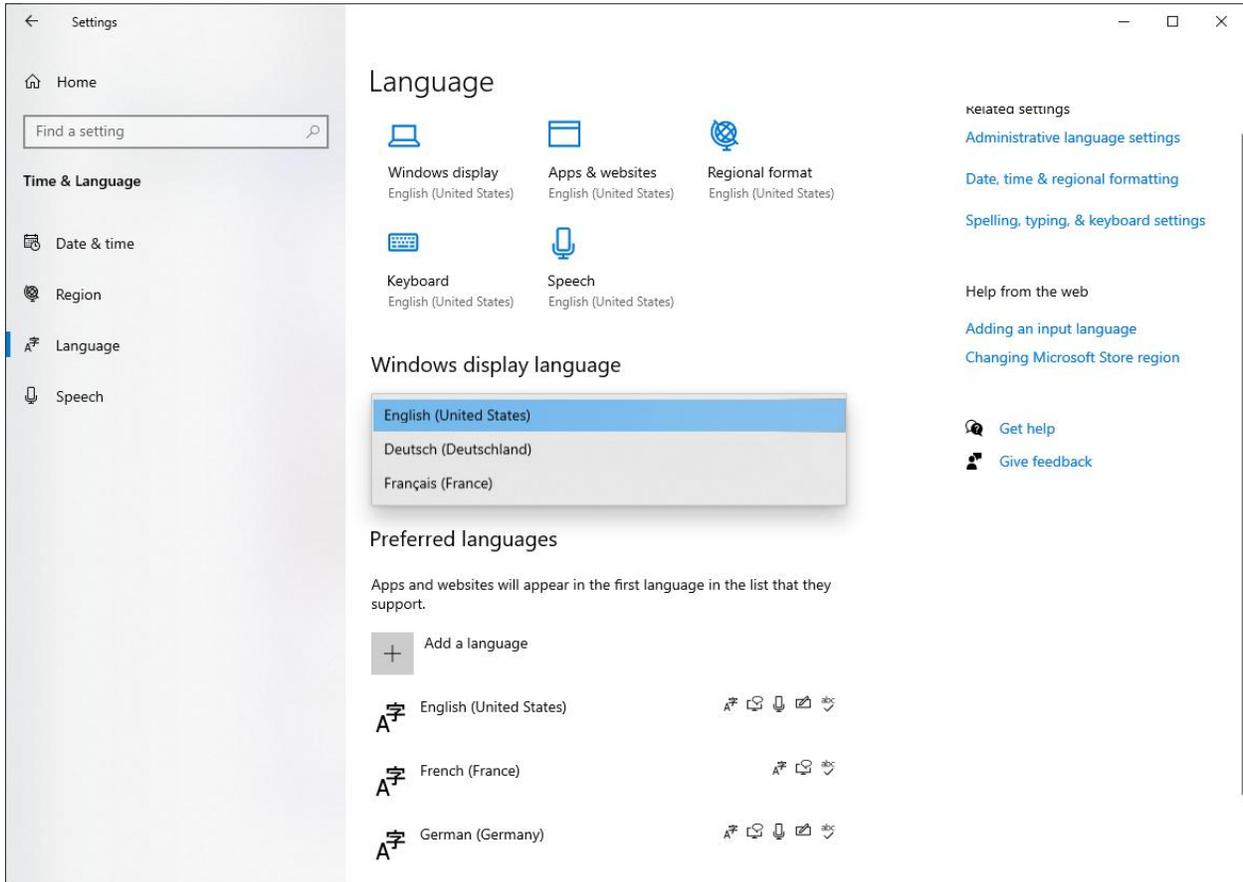
In the following example the upper left quadrant of the virtual A, P, L keys was clicked while the keyboard focus was in the command line so that the APL glyphs were entered there.



Windows Components necessary for a Keyboard Definition

Rendering of a keyboard definition in an APL64 session requires that the appropriate Windows language preference is selected on the target workstation. In Windows 11, the 'Time and Language' dialogue is used to install a Windows language preference. More than one Windows language preference may be

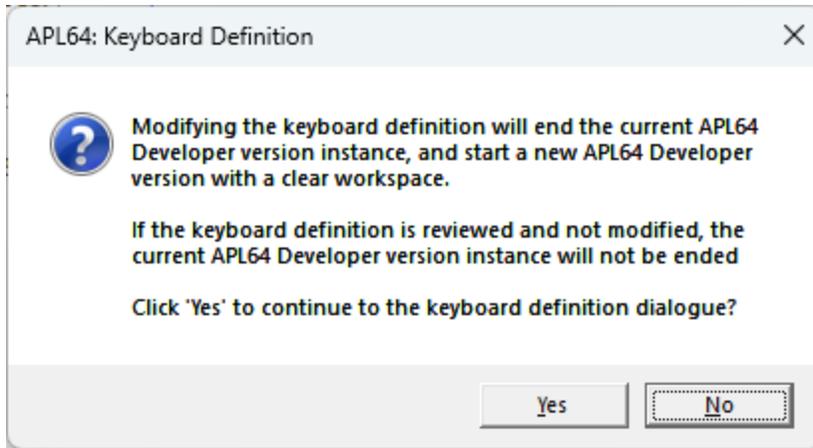
installed on a workstation, but the appropriate Windows display language setting must be selected for proper operation of an APL64 keyboard definition.



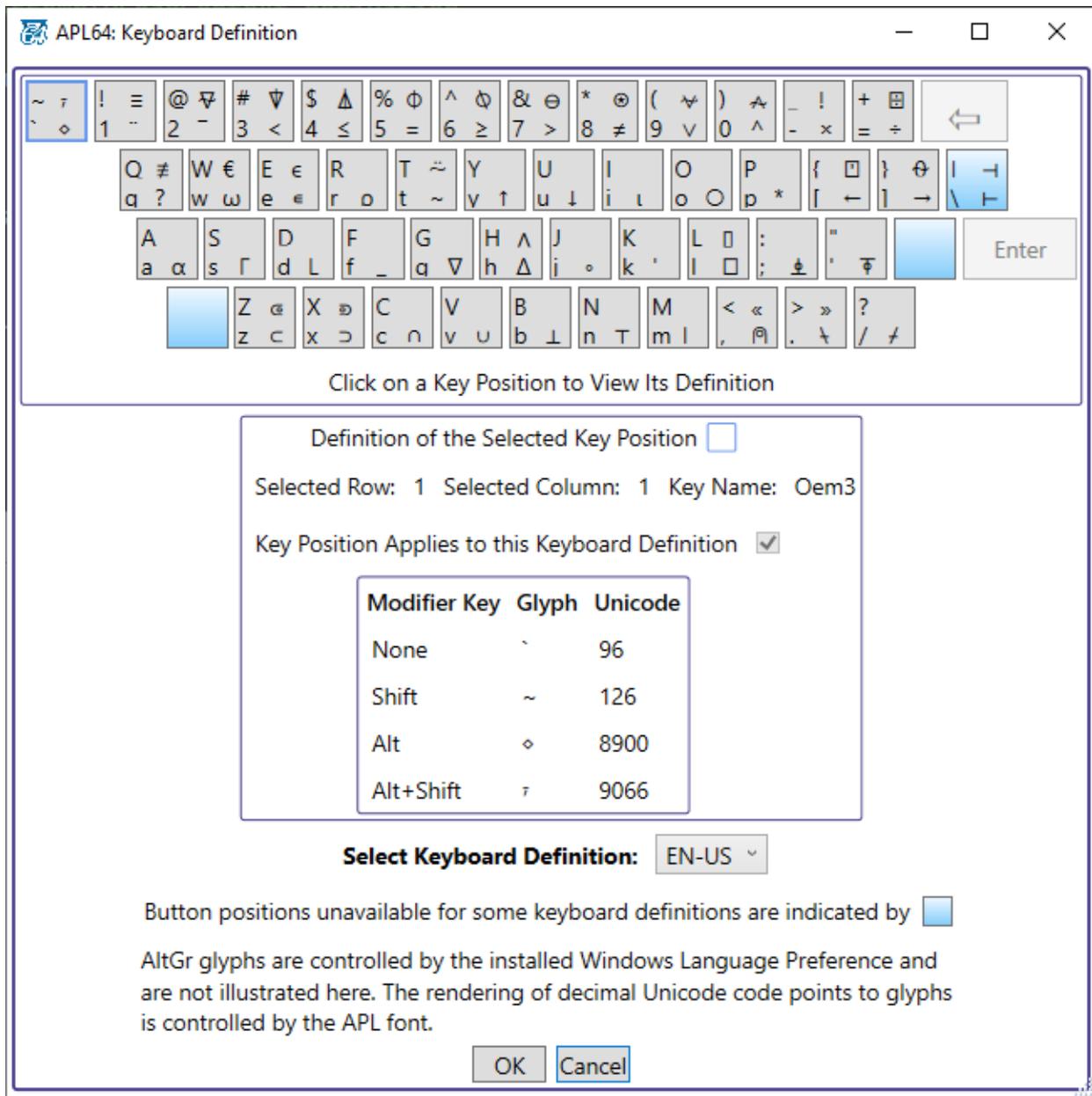
APL64 Keyboard Definition Dialogue

The APL64 Keyboard Definition dialogue is available to select an APL keyboard definition to be used in new APL64 session instances from a user-selected 'Keyboard Definition' basis.

When the **Options | Keyboard Definition** menu item is clicked a message box is presented to determine if the APL64 programmer will continue to the Keyboard Definition dialogue:



If the 'Yes' button is clicked, the Keyboard Definition dialogue will be presented:



The APL64 Keyboard Definition dialog provides for several basic keyboard layouts, where each physical key is associated with appropriate glyphs corresponding to the use of the Shift, Alt and Alt+Shift keystroke modifiers. The APL64 Keyboard Definition dialog illustrates a physical keyboard layout as a matrix of keys. Some keys are not available in all keyboard definitions, indicated by a 'blue gradient background' without glyphs.

The keyboard definition dialog is modal. If the keyboard definition is modified and saved by this dialog, it will be applied to any new APL64 sessions.

Top Frame

The top frame in the keyboard definition dialogue represents the physical keys available for association with Unicode glyphs. Because there are two generally available physical keyboard designs, certain keys are indicated, with the blue gradient background, as dependent on the physical keyboard to be used. The border of the selected physical key is rendered in blue.

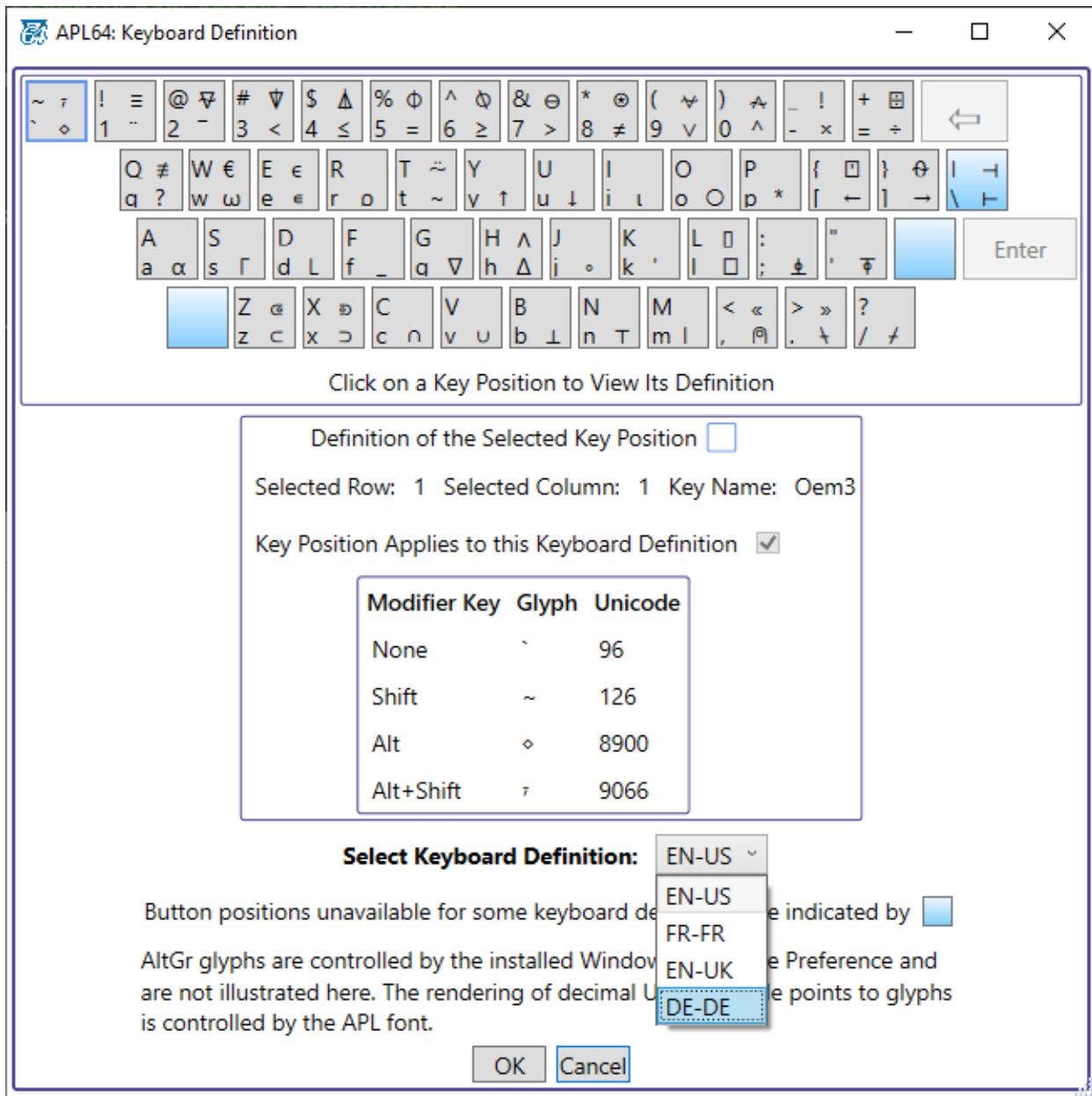
Center Frame

A specific physical key is selected by clicking on it in the top frame of the keyboard definition so that its Unicode glyph association may be edited in the center frame of the keyboard definition dialogue.

- Definition of the Selected Key Position indicated by colored border
- Selected Row: ## Selected Column: ##
When a physical key is selected, its row and column on the physical keyboard is displayed using index origin 1
- Key Position Applies to this Keyboard Definition
If checked this key will be deemed present on the physical keyboard. Note that although this check box is available for all physical key positions, it generally applies only to the 'blue gradient background' physical key positions.
- Glyph for 'None' Modifier Key State
This is the Unicode glyph associated with no Shift, Alt or Alt Shift keystroke modifiers.
- Glyph for 'Shift' Modifier Key State
This is the Unicode glyph associated with the Shift keystroke modifier.
- Glyph for 'Alt' Modifier Key State
This is the Unicode glyph associated with the Alt keystroke modifier.
- Glyph for 'Alt + Shift' Modifier Keys State
This is the Unicode glyph associated with the Alt + Shift keystroke modifier. Not all keys have a Unicode glyph when the Alt + Shift modifier keys are pressed.

Bottom Frame

- Select Keyboard Definition
A keyboard definition may be selected using any one of the available 'Keyboard Definition' options. Selecting a different keyboard definition item replaces the keyboard definition to be applied to any new APL64 sessions.

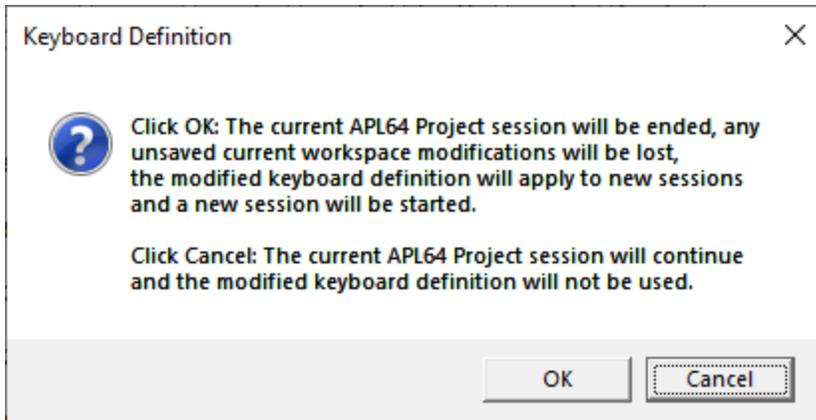


- Cancel

After viewing the current APL64 keyboard definition, click the 'Cancel' button to abandon any keyboard definition modifications made using this dialogue and continue to use the current, unmodified keyboard definition in the current and future APL64 sessions.

- OK

Click the 'OK' button to save and use the keyboard definition in future APL64 sessions. When the 'OK' button is clicked, a subordinate message box will provide two options:

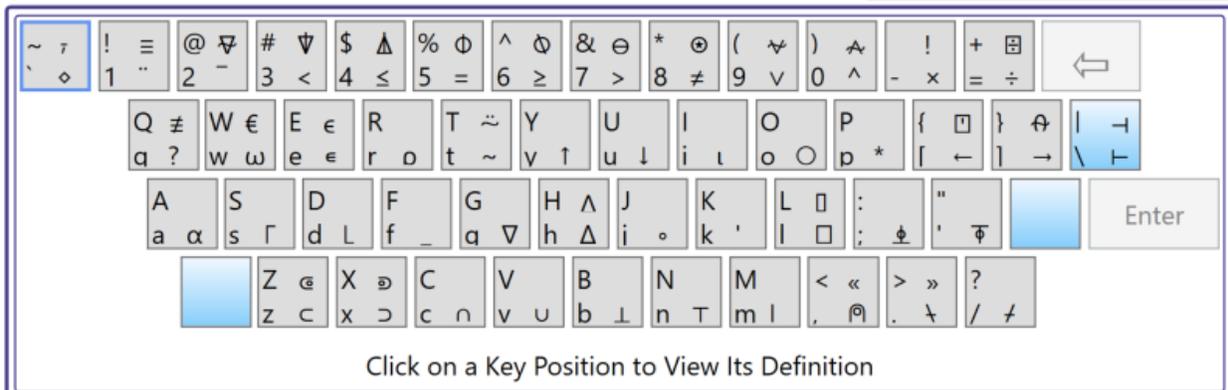


- AltGr Glyphs

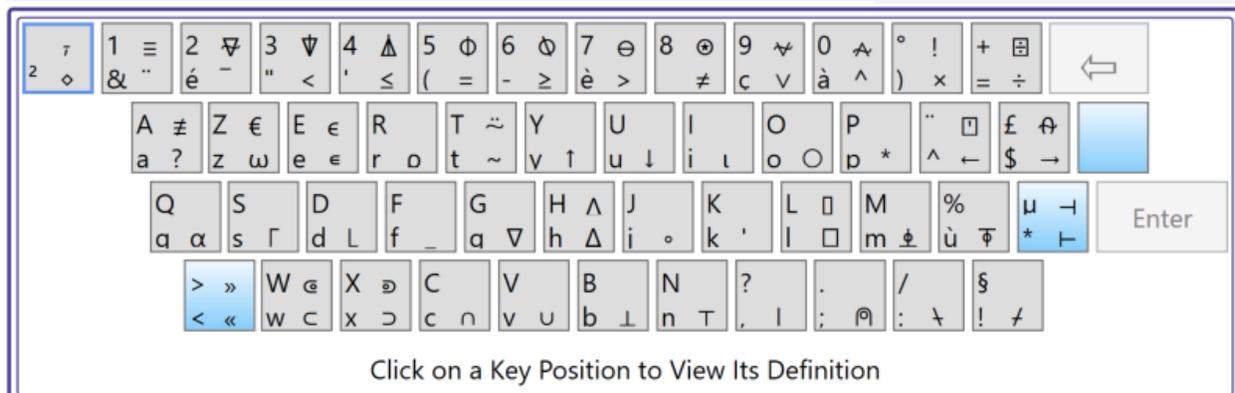
Glyphs associated with the AltGr (right Alt) modifier key state are controlled by the installed Windows language preference and are not illustrated or specified by an APL64 keyboard definition.

Available Keyboard Definitions:

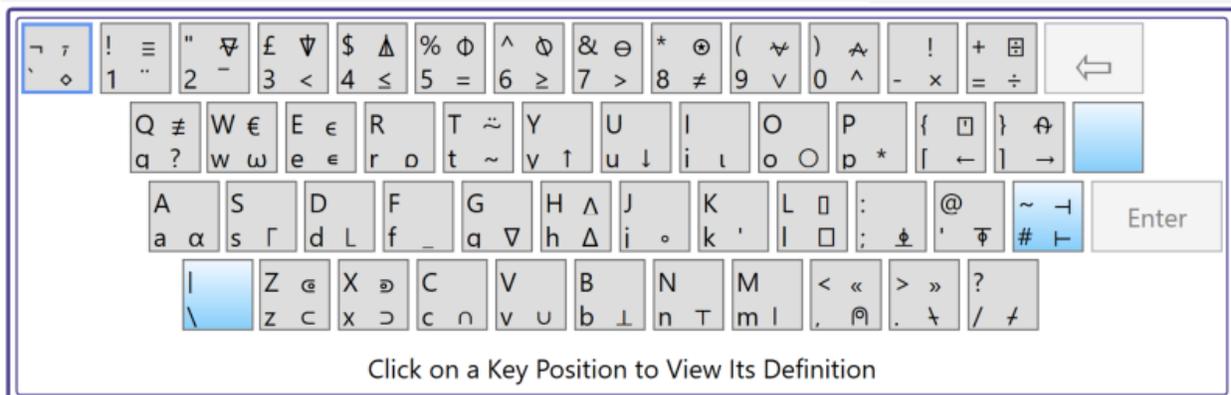
EN-US



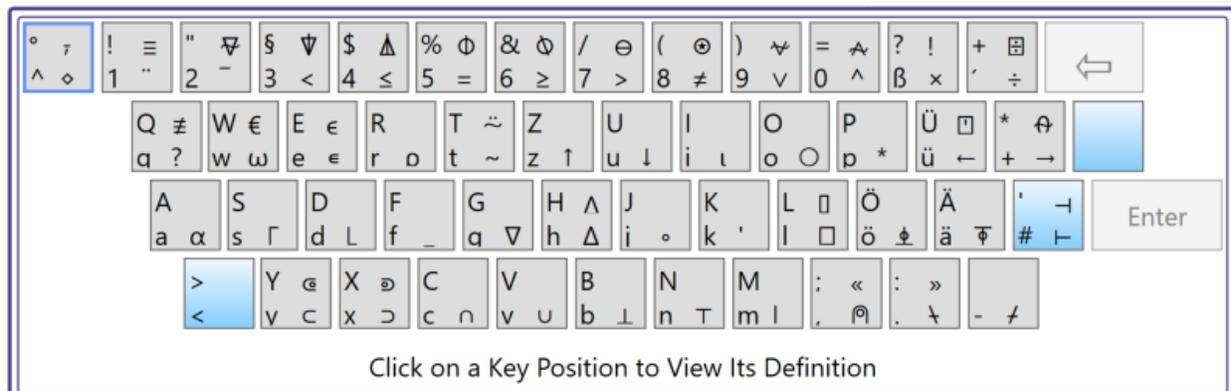
FR-FR



EN-UK



DE-DE



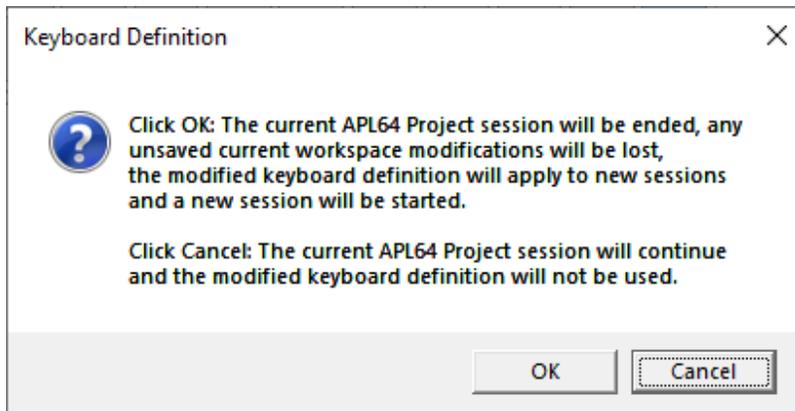
Default Keyboard Definition

If the keyboard definition is not modified by the user, the default keyboard definition is the 'EN-US' keyboard definition.

Options | Keyboard Definition Dialogue Workflow

- Check the APL64 executable's command line arguments to assure that these options do not prevent the use of other than the default 'EN-US' APL keyboard definition. Specifically, the 'A64DS=1' or its equivalent command line argument will prevent the use of other than the default APL keyboard definition.
- Open the APL64 Keyboard Definition dialogue
- Select the 'Keyboard Definition' from among the available options. The selected keyboard definition item is the keyboard definition being used in the current APL64 session.
- If the selected keyboard definition basis is sufficient, click the OK button and respond to the resulting message box. This will typically be the case if the 'EN-US', 'DE-DE', 'EN-UK' or 'FR-FR' APL keyboard bases are desired. The appropriate Windows language component must be installed and that

language selected in the Windows Language dialogue for proper operation of an APL64 keyboard definition.



- When the new APL64 session is started, the workstation-based, XML-format 'settings' file will contain the user-defined, custom, APL keyboard definition. The location of the settings file can be obtained using the **APL64 Session | Configuration Settings | Settings File Path** dialogue. This keyboard definition may be exported using the **APL64 Session | Configuration Settings | Export Settings...** dialogue and imported to other workstations using the **APL64 Session | Configuration Settings | Import Settings...** dialogue.

Keyboard Definition Contained in the User Settings File

Between APL64 sessions the user-selected keyboard definition is contained in the XML-format user 'settings' file. The user 'settings' file location is obtained via the **Session | Configuration Settings | Settings File Path** menu item.

When an APL64 session instance is started by the user, the settings file is accessed and, subject to the applicable APL64 executable command line arguments, used to define the keyboard layout for that APL64 session instance.

The user 'settings' file section containing the keyboard definition is CurrentKeyboardDefinition.

```
<FetchObjectSelectorPriorObjectNameToMatch/>
<AplStmtsHistorySelectLastStmt>true</AplStmtsHistorySelectLastStmt>
<AplStmtsHistoryCopyTarget>Clipboard</AplStmtsHistoryCopyTarget>
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<LocalDocumentationBrowserPrefix>file:///</LocalDocumentationBrowserPrefix>
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<CurrentKeyboardDefinition>EN_US</CurrentKeyboardDefinition>
▶ <DebugPaneInfoSaved>
...
</DebugPaneInfoSaved>
▶ <SiPaneInfoSaved>
...
```