APL64 WRE and APL64 CPC Overview

Contents

Overview

Learn about the two APL64 runtime implementations, and when they may be used.

What is an APL64 WRE

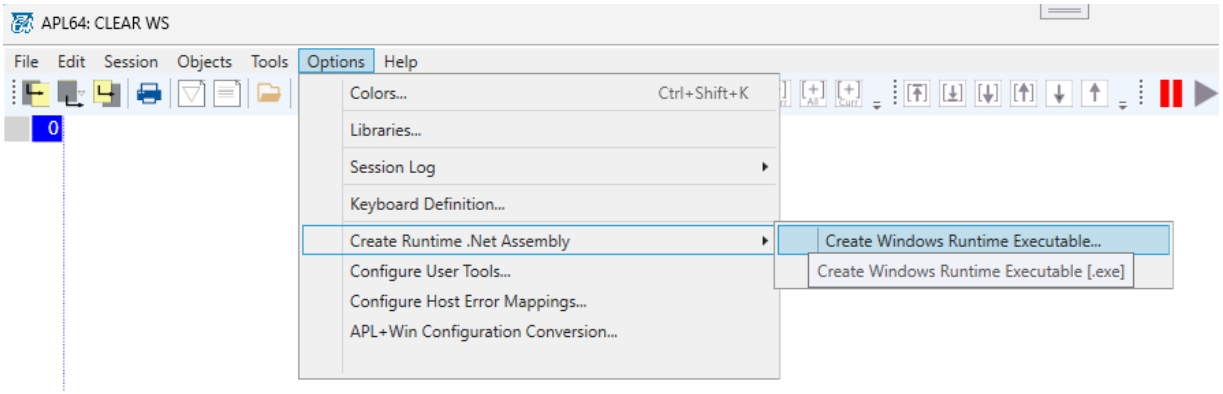
WRE is a Windows Desktop Application

An APL64 WRE (Windows Runtime Executable) is a runtime version of APL64 which is exclusively designed for Windows desktop applications. An APL64 WRE includes all the APL64 functionality including □wi GUI, ActiveX, and □wcall. An APL64 WRE can contain multiple workspaces and files. An APL64 WRE must have a 'main workspace' with a □LX function which includes a □WI Form with a Wait event. An APL64 WRE is not cross-platform. An APL64 WRE cannot be used as a 'background process'.

WRE is a Self-contained Exe-format File

An APL64 WRE is a self-contained application which presents a Windows desktop GUI and processes user-provided information using APL functions. A WRE is ready-to-run. A separate Windows installer is not required.

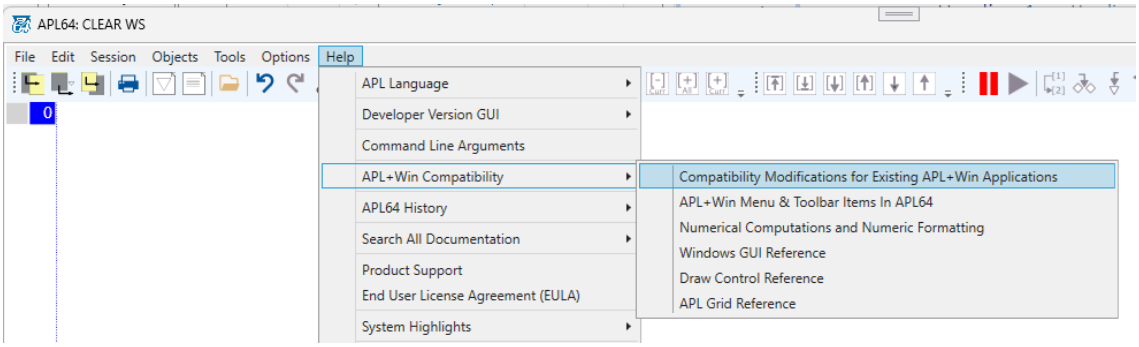
Creating a WRE



When an APL64 WRE is created the result is a .Net assembly. This assembly is a complete Windows desktop application in the form of a ready-to-install and run Windows exe-format file. An APL64 WRE may be simply copies to the target workstation and run by double (left) mouse clicking it. An APL64 WRE can also be included in an APL64 programmer-developed installation package.

Transition an APL+Win Desktop Application To APL64

Learn about transitioning an 'traditional' APL+Win Windows desktop application to an APL64 WRE here:



What is an APL64 CPC

CPC is a Cross-platform Application Component

An APL64 CPC (Cross-platform component is a .Net assembly in Nuget Package format. An APL64 CPC is cross-platform, so it can be used in the Windows, Android, Linux and Apple operating system environments.

CPC in Desktop, Server, Browser or On-demand Applications

An APL64 CPC can be used in a desktop application, a web server application, a cross-platform GUI application, a web browser application and 'server-less', 'on demand' cloud application, where a dedicated, '24-7', web server is not needed.

CPC on Many Platforms

An APL64 CPC can be used on many platforms including Windows desktop, browser-based, server-based, Docker container, and cloud-based platforms such as Microsoft Azure, Google, Amazon, IBM.

CPC on Many Devices

An APL64 CPC can be used on devices such as personal computers, servers, phone, tablets, and the 'internet of things'. An APL64 CPC can be used as a 'background process'.

CPC is a .Net Nuget Package

Because an APL64 CPC is a .Net Nuget package, it can be used in any environment which supports the open-source, no-cost, .Net technology.

When an APL64 CPC is created, the result is a .Net assembly. This assembly is a Nuget Package (zip) file with specified content so that it is compatible with any .Net programming environment and language. An APL64 CPC cannot be run independently. An APL64 CPC must be included in a .Net application.

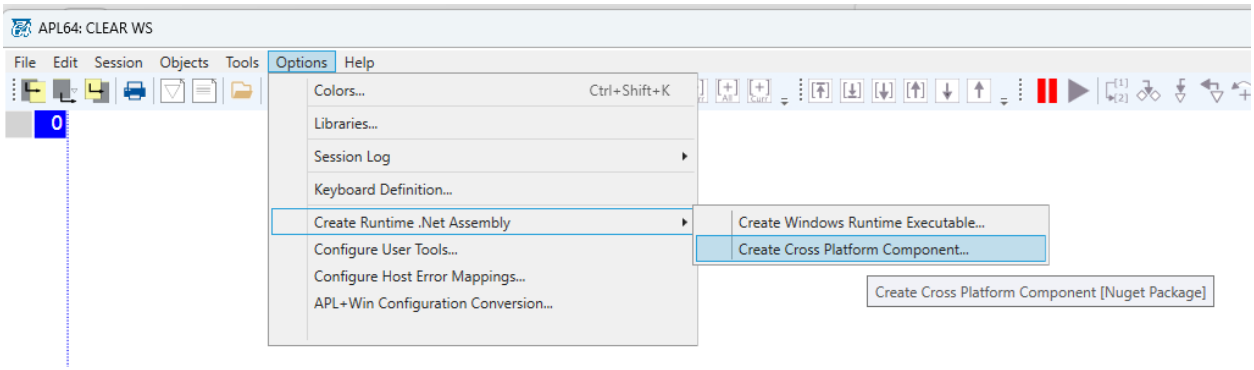
The smallest possible APL64 CPC is 1.5 megabytes. The ultimate size of an APL64 CPC will depend on the number of APL64 programmer-developed functions and variables added to the CPC workspace.

CPC used for Calculations, Algorithms, Database Actions

An APL64 CPC cannot create a GUI because it is designed to be cross-platform, and technologies like ⎕wi, ⎕call, and ActiveX are Windows only technologies. An APL64 CPC can be used in an application which has a GUI created by a non-APL technology such as html/javascript web pages in a browser, Windows Presentation Foundation, Windows Forms, Excel, MAUI.

Creating a CPC

The APL64 developer version include a utility to create a CPC:



An APL64 CPC is composed of an APL64 workspace which must contain at least one APL64 'public' function. Each public function in an APL64 CPC is available to the containing .Net application as a .Net method of a .Net class. The class name, method names and data types of the arguments and results of public functions are determined by the APL64 programmer who created the APL64 CPC. An APL64 CPC workspace can contain additional, non-public functions. The workspace and the non-public functions in a CPC are not visible or available to an application which contains an APL64 CPC. The ⎕LX of the workspace, if any, is not considered, as an APL64 CPC cannot be run.

Get Started with the CPC Examples

Learn more about APL64 CPC application examples here: