

# What is the difference between the isCOBOL Graphical Terminal and a terminal emulator or web-to-host (e.g. for 3270 emulation) solution?

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Veryant's isCOBOL Graphical Terminal enables users signing in with a terminal emulator such as PuTTY to launch both character-based and graphical applications from the command line without requiring an X Server or X Desktop client software.

Since the early 80s COBOL dialects such as RM/COBOL, ACUCOBOL and Micro Focus Server Express, on open systems such as Linux, UNIX and Windows, have supported the ability to address a full terminal screen using enhanced ACCEPT and DISPLAY statements with POSITION, LINE and COLUMN phrases and SCREEN-SECTION.

To run these types of applications and facilitate their modernization, the isCOBOL Graphical Terminal builds upon the isCOBOL Application Server and Thin Client technology to project the COBOL application's user interface onto the desktop.

In addition to their full support for character user interfaces the isCOBOL Graphical Terminal and Thin Client also support the full range of graphical controls and other GUI capabilities used in modern application development.

Before the isCOBOL Graphical Terminal, the thin client did not work in conjunction with a terminal emulator. The thin client allows applications written in COBOL for Linux and UNIX terminals (and terminal emulators) to run in a window on the Windows, Mac, Linux or UNIX graphical desktop without requiring a terminal emulator. So it typically replaced the terminal emulator altogether. User's would not sign into a Linux or UNIX account before launching the COBOL application. This meant that some re-engineering was required to prepare an application for deployment.

Programmers had to rewrite parts of the application that depended on user environment variables, home directory, reading and writing from stdin and stdout/stderr, or the ability to call external applications that required a terminal (e.g. with CALL "SYSTEM").

Now, because it works in conjunction with a terminal emulator, the isCOBOL Graphical Terminal eliminates the need for programmers to address these limitations. COBOL programs designed for terminals work right out of the box, and can then be modernized by adding graphical features such as menu bars, tool bars, status bars, push buttons, radio buttons, check boxes, bitmaps, mouse support and more, all without changing the COBOL application's internal flow and design.

With isCOBOL Graphical Terminal, user's continue to sign in to their Linux/UNIX accounts and launch the COBOL application as before. The COBOL application's user interface pops up in a separate window. The application has access to the user's Linux/UNIX environment variables and home directory, and the ability use the terminal emulator for stdin, stdout and stderr. Additionally, calls to SYSTEM and C\$SYSTEM run in the terminal emulator. This means that applications can call terminal-based utilities and even full screen terminal-based applications.