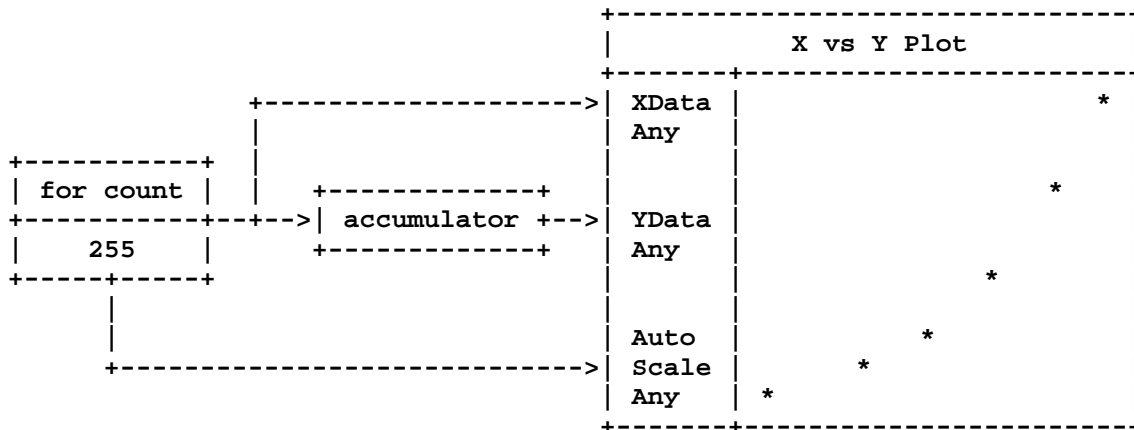


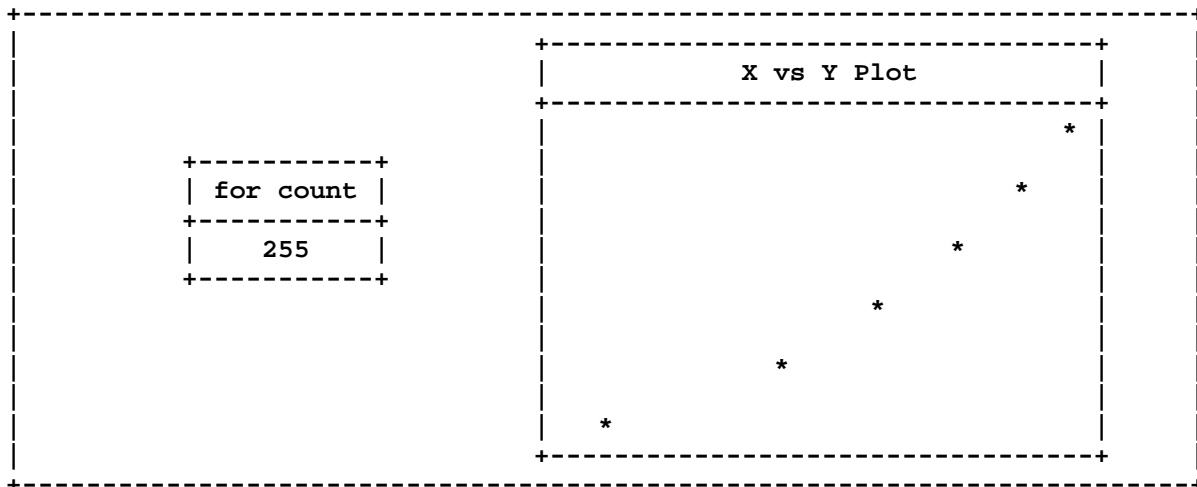
HP VEE Product Support Overview

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* HP VEE is a graphical programming environment that is optimized for scientific and engineering applications, particularly in test and measurement. Users write programs by connecting blocks together, much as if they were creating a flowchart:



Once the VEE program is complete, the user can create a "panel view" to hide the implementation details and provide a simple user interface.



A proficient VEE programmer can use VEE "objects" to greatly simplify tasks such as instrument control, building user interfaces, and test sequencing.

VEE includes objects for:

- Program control, such as loops and decision-making constructs.

- Math operations, including matrix math, statistics and probability, calculus, and signal processing.
- String processing.
- File-I/O, including the ability to create and read records containing different types of information, and "datasets" consisting of sets of such records.
- Display of graphical and text data.
- And for all the other elements needed to construct a program.

The user can construct user interfaces with display objects such as thermometers, fill tanks, and "alarm light" indicators; objects to display bitmaps; input objects such as toggle, rocker, and slide switches; and easy-to-use pop-up dialog controls.

The user can also build his or her own "UserObjects" from other VEE elements, convert them into "UserFunctions", and create libraries of such UserFunctions.

Windows DLLs can also be written for VEE for Windows to add new functions. As of VEE 5.0, VEE can also access external functionality through ActiveX Controls, and interact with Windows applications through ActiveX Automation.

VEE also supports LAN Socket communications, and VEE-to-VEE remote procedure calls. It includes a C API to allow VEE to be called from C programs, and an ActiveX control to allow it be called from Visual BASIC and other ActiveX Automation compatible applications.

VEE can (almost transparently) use a wide variety of data types such as waveforms and complex numbers. You can easily examine the data "containers" that VEE transfers the data in to inspect their contents. VEE also includes debugging tools that allow you to trace the execution and data flow within a VEE program, examine the data on lines and input pins, and set program breakpoints. Extensive online help is built into VEE.

VEE includes a "sequencer" that is useful for running sets of tests on an external device; the sequencer has adequate smarts to allow tests to be run conditionally on the results of earlier tests, and can generate logging text output to indicate the results of the tests.

Very importantly, VEE provides several levels of instrument control: instrument panel and Plug&Play drivers to control specific instruments, and "direct I/O" provides command-level control over an instrument. VEE provides an interface "bus I/O monitor" to allow users to track and debug interface transactions.

I/O capabilities include access to a wide variety of HP and National Instruments HPIB and GPIB cards, E2075 GPIO card support, access to the HP LAN-HPIB gateway and server software, direct VXI backplane support (on HP machines only), and support of up to 256 RS-232 ports (with G.01.00 or greater HP I/O Libraries software). National Instruments MXI-2 is *not* supported on the PC platform.

Currently, HPIB card support on PCs includes:

	Win95	WinNT
HP 82335	YES (1)	no
HP 82340A/B	YES	YES
HP 82341B/C	YES (2)	YES (2)
HP 82341D	YES	no (3)
HP 82350A	YES	YES

Relevant notes to this table include:

- (1) The 82335 does not support VISA and won't work with PNP drivers.
- (2) The obsolete 82341A card is not supported.
- (3) The 82341D will be supported on WinNT when NT 5.0 comes out.

HPIB card support on HP-UX includes:

E2071B/C	Same hardware as 82341B/C
E2071D	Same hardware as 82341D (10.2 HP-UX & above only)
E2070A	Same hardware as 82335A/B (HP-UX before 10.2 only)

National Instruments card support on PCs includes all NI GPIB cards compatible with the NI GPIB32.DLL driver.

* Year 2000 compliance has become an important issue with HP VEE and so evaluations have been performed on the current 5.0 version of HP VEE, as well as all HP VEE formal releases back to and including VEE 3.12. All these versions meet the requirements of the HP Year 2000 test suite.

* VEE cannot create stand-alone executable programs. An end user has to have a VEE Run-Only version to run VEE programs. As of VEE 4.0, this Run-Only version is provided with the VEE product, and the end user can duplicate that Run-Only version and distribute it as needed.

Versions of VEE beginning with 4.0 by default run in a "compiled" mode that provides faster performance than earlier versions of VEE. The compilation refers to conversion of VEE objects into an intermediate form, and does not indicate that VEE can generate stand-alone programs. However, the unlimited license for the Run-Only version makes that no major issue, since the Run-Only allows VEE programs to run in a highly transparent fashion.

* VEE was originally released on the HP UN*X (HP-UX) platform and is still supported on that platform. It is not supported on MIPS or Dec Alpha platforms. The Windows version is supported on Win95 and WinNT. Win98 is still under evaluation.

VEE is perfectly compatible between HP-UX and Windows for the same revision level of VEE. The only difference is that under HP-UX the lines of a source file end in LF, while under Windows they end in CR-LF, but this is true in general for text files moved between the two environments. Of course, if you have platform-specific objects in the program, such as To/From Named Pipe under HP-UX, they won't work.

However, VEE is not backward-compatible between revisions. Depending on the revisions you jump from, you will either have slight problems, or you won't load at all. Fortunately, you can always load programs from older revisions into later ones -- just not the reverse.

VEE programs from older versions of VEE should run fine in later versions of VEE. However, the underlying VEE architecture was modified in VEE 4.0 and again in VEE 5.0, meaning there are slight differences in operation. For this reason, a user can set VEE 5.0 to a VEE 3 or VEE 4 compatibility mode to ensure that programs from older versions of VEE operate as before.

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