

Bugs Fixed In VEE 5.X

last update 27 aug 98 / greg goebel / public domain / vwb_5x

* This document lists bugs fixed in VEE 5.0.

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[*] FIXED IN VEE 5.0 / VEE Execute Program Causes Memory Leak

* If you perform EXECUTE PROGRAM from HP VEE, it drops a little memory each time a program is executed.

[*] FIXED IN VEE 5.0 / Memory Hoard With Direct I/O Address Pins

* On current versions of VEE, you can bring out a pin on the Direct I/O object to allow programmatically setting the address of a instrument.

Unfortunately, every time you do this, VEE allocates a little more memory. This is a memory "hoard", not a memory "leak". A leak is where a program allocates memory and then misplaces it; a hoard is where a program continues to keep allocating memory it doesn't need. A hoard is harder to track down because, as far as the operating system is concerned, the program is acting legally.

You can also bring out a pin on Direct I/O to allow you to specify an I/O configuration name. It has the same problem as the address pin.

[*] FIXED IN VEE 5.0 / Hostname Pin Causes BRB

* If you bring out the Hostname pin on a Direct I/O object and try to shove a LAN address into it, you get a Big Red Box.

[*] FIXED IN VEE 5.0 / ID Compiler Won't Work

* In principle, you should be able to configure an ID through the Instrument Manager and it will be automatically compiled. In practice, unfortunately, there's a long file names bug in VEE 4.0 that can give an error if you do this.

There's a simple workaround. Just run a DOS window, change directories to VEE/HPIDS, and execute:

```
..\hpidc <driver_name>
```

[*] FIXED IN VEE 5.0 / RPC Problem

* If a Remote UserFunction has an output which is not pinged, when the call attempts to return <no data> it will GPF (Segmentation Violation).

[*] FIXED IN VEE 5.0 / VEE RPCS Don't Like Indirect Function Calls

* A user notified us that Callable VEE was giving him a Segmentation Error on the remote host. The remote VEE program was loading a UserLibrary and then indirectly calling a UserFunction in that UserLibrary. Callable VEE had no direct access to that UserFunction.

The lab didn't know of this problem and suggested that Callable VEE in itself wasn't the root of the problem -- it would also likely occur in VEE-to-VEE RPCs, which were easier to deal with. So I conducted an experiment with VEE-to-VEE RPCs to see if I could duplicate the problem.

I wrote a VEE library file named "rpc_two.lib" that contained a single function, "MySquare", that simply multiplied a number by itself.

I wrote another VEE library file named "rpc_main.lib" that contained three functions:

- "LoadLib" loaded the "rpc_main.lib" library.
- "Square1" called "MySquare" in that library.
- "Square2" simply multiplied a number by itself and was used as a control.

I left these libraries on my PC (running Win95) and then ran a VEE program on my HP-UX workstation to remote-load "rpc_main.lib", call "LoadLib", and then call "Square1". I got the error:

```
Error in Service on Remote Host
```

```
Remote User Function, Square1, reports error:
```

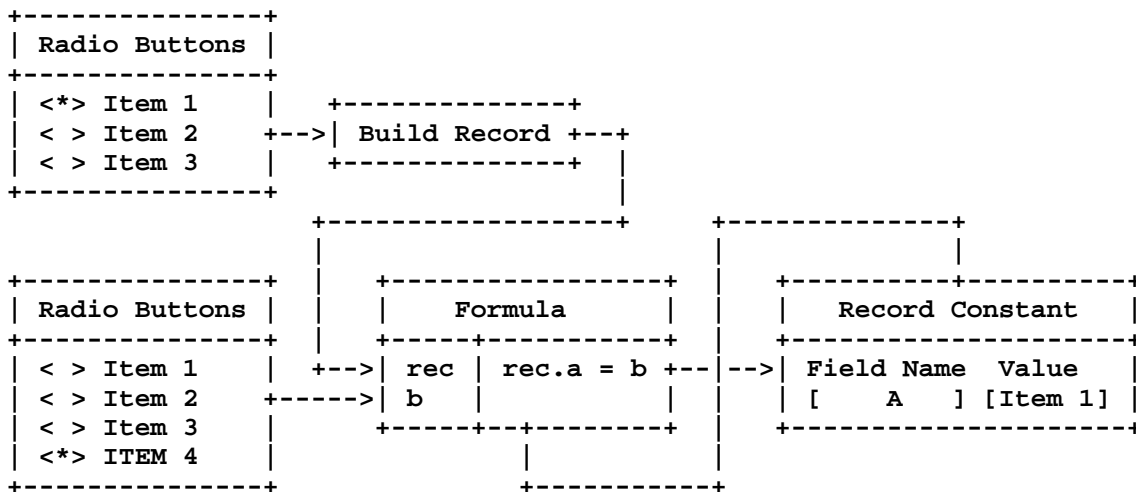
```
Error: 979 Internal Error: Segmentation violation (signal=11)
```

...
Error number: 865

Then I changed the RPC to "Square1" to the control function, "Square2". It worked fine.

[*] FIXED IN VEE 5.0 / Enum Mismatch Error Not Handled Properly

* A customer provided us with the following program that indicated an error:



Note that ITEM 4 is set on the lower ENUM object. Since this value is not in the list of the ENUM at top, attempting to assign the value of ITEM 4 to a record based on that ENUM list should generate an error. In fact, it does not, but the value field of the Record Constant goes nuts (after about a half dozen executions of the program) and then a Big Red Box flashes up.

The problem is that VEE didn't nail the illegal operation immediately. It does now.

[*] FIXED IN VEE 5.0 / Print Program Truncations

* If you use PRINT PROGRAM to print a function that's bigger than the screen, sometimes you get multiple pages that give the entire function in parts, sometimes you just get one screen.

The problem occurs if a window in the program is *maximized*. You can ensure this is not so by bringing up the main program window (without any other functions in windows) and ensuring that it is not maximized.

[*] FIXED IN VEE 5.0 / Problems With Pop-Up Dialogue Placement

* We've had a number of complaints from customers using VEE 4.X that when they run programs, they have no control over the placement of the pop-up dialogues when they appear on the screen.

This is a bug, but there is a simple workaround. The trick is that even though you have a panel view in your VEE development environment, positioning the pop-ups relative to that panel view does no good.


```
|Mapping Linear|
+-----+
```

Run the program. Now change the settings to:

```
+-----+
| Record |
+-----+
| Scale   Y |
| Min     +1 |
| Max     +10 |
| Mapping Log |
+-----+
```

Run the program again and it will error:

```
Bounds for Log mapping must be > 0
```

The Log range check is done with the old scale values (-10 ... +10) The same happens when a program dynamically changes the Mapping of an XY Trace object.

Workaround: Change the record to an array where the first element is:

```
Scale   Y
Min     +1
Max     +10
Mapping Linear
```

-- and the second element is :

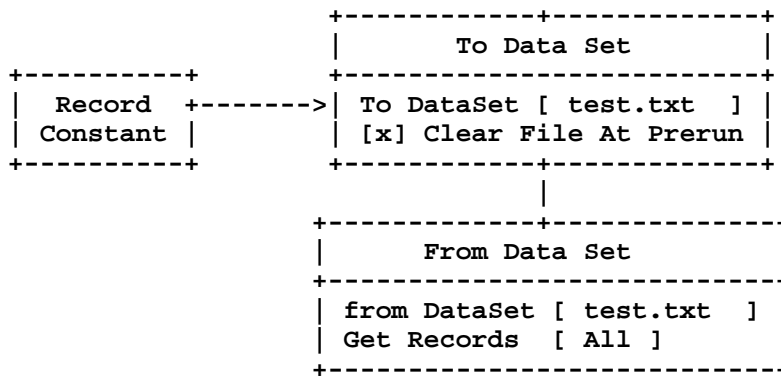
```
Scale   Y
Min     +1
Max     +10
Mapping Log
```

The first element of the array is apparently used first so that it will set the scaling to Linear with positive values. Then the second element can set the scaling to Log.

[*] FIXED IN VEE 5.0 / Dataset Operations Cause Hangup

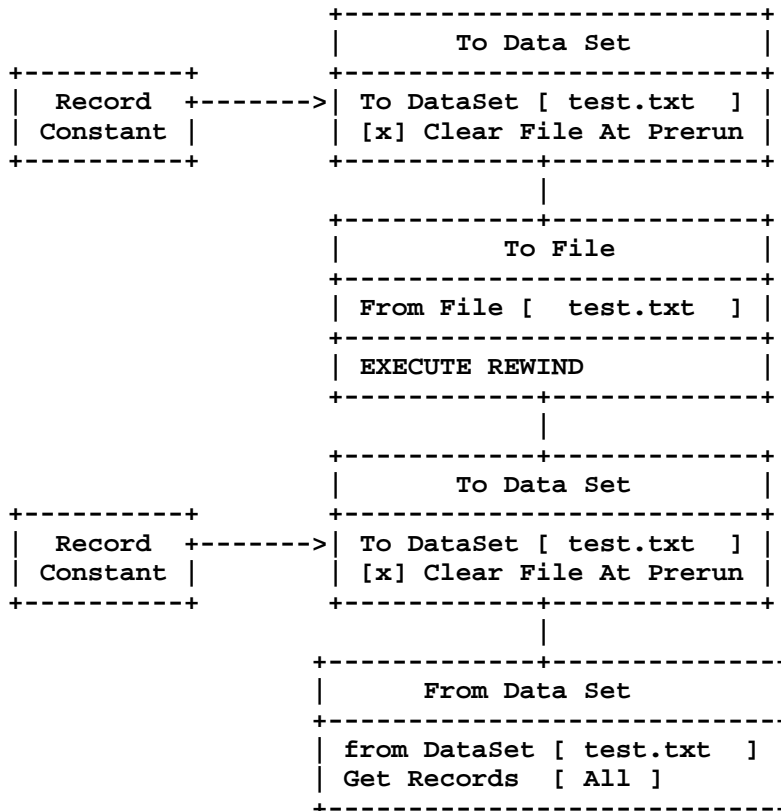
* A Euro support person reported a fairly ugly bug with VEE and EXECUTE REWIND. His program looked like this:

```
+-----+
| Record +----->| To DataSet [ test.txt ] |
| Constant | | [x] Clear File At Prerun |
+-----+
|
+-----+
| From File |
+-----+
| From File [ test.txt ] |
+-----+
| EXECUTE REWIND |
+-----+
|
```



This would cause an apparent lockup that actually results in the program allocating more and more memory until an out-of-memory error occurs. CPU usage goes to 100% until that happens.

All you have to do to get it to work is change the From File to a To File:



[*] FIXED IN VEE 5.0 / Coordinate Record Allocate Problem

* There seems to be a problem with creating a constant record with the following parameters being set right off the bat:

```

Type: Coord
Num Dims: 1
Dim 1 Size: 250 (any size greater than 1)
Num Coord Dims: 2
Map1: Linear 0...0

```

It only creates a size 1 or 2 coordinate array. Sometimes it creates a size 10 (with Dim 1 Size set to 10), if I try it enough.

There is a workaround. First, set the following:

```
Type: Coord
Num Dims: 0
Num Coord Dims: 2
```

Then click on OK. Then set the following:

```
Type: Coord
Num Dims: 1
Dim 1 Size: 250 (any size greater than 1)
Num Coord Dims: 2
Map1: Linear 0...0
```

Then click on OK. This should work OK.

[*] FIXED IN VEE 5.0 / Disastrous (If Obscure) List Object Bug

* A Finnish customer wrote the following simple VEE program:

```
+-----+ <-- Set to Auto-execute.
| Drop-Down List |
+-----+
| Item 1          +-->| OK +--+
+-----+          +-----+
                    |
                    +-----+
                    | Drop-Down List |
                    +-----+
                    | Item 1          |
                    +-----+
```

So, you make a selection from the Drop-Down List at top, starting the program, make a selection from the one at the bottom, then click OK.

VEE menus no longer work and VEE is locked up. The toolbar seems to work OK, though.

[*] FIXED IN VEE 5.0 / List Object Panel View Bug

* When:

- The panel view of a UserObject is shown in a program (by selecting Restore on the Icon view of the UserObject).
- And a Selection Control object configured as a List has been added to the UserObject panel view,
- The List object accessed via Edit UserObject seems disconnected from the List object accessed via the panel at the next higher level.
- I say disconnected because changes in one are not reflected in the other.

- This is only true for the List. The other styles (Radio Buttons, Cyclic Button etc.) all work correctly.

[*] FIXED IN VEE 5.0 / Message Box Pins Get Mixed Up

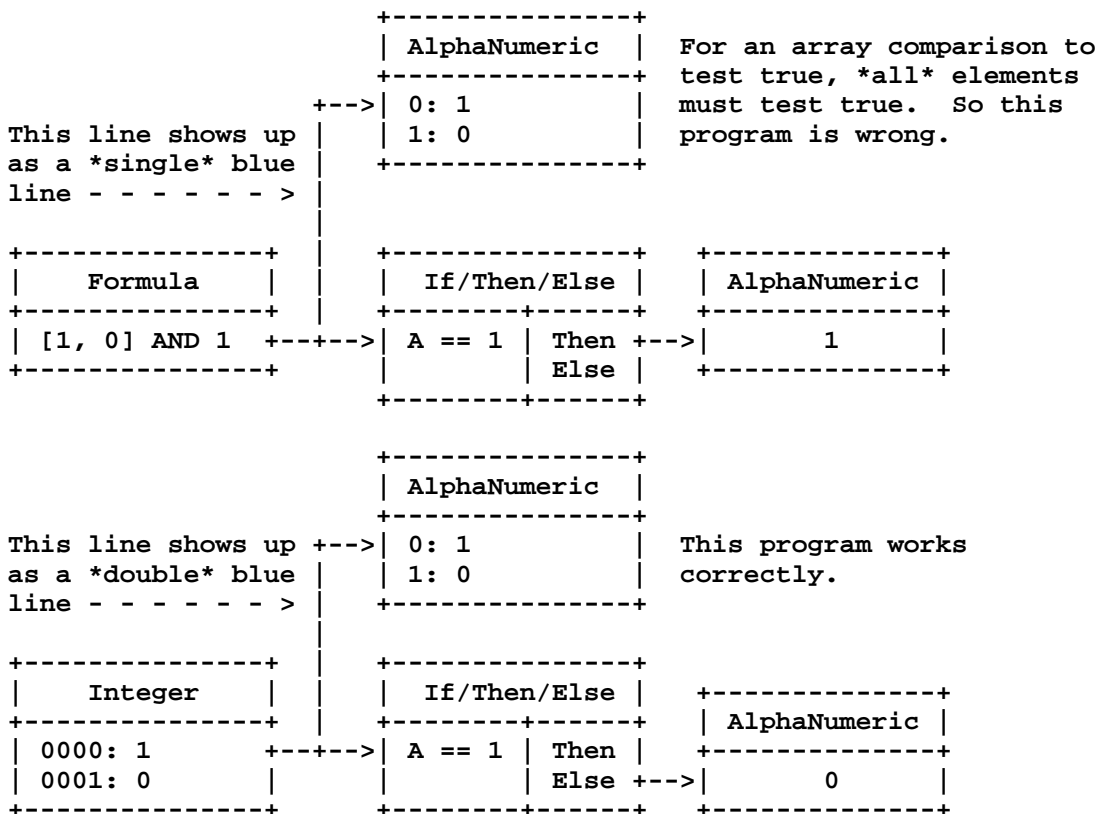
* It seems that if you set the button configuration in a Message Box and then change it, the poor little Message Box gets confused.

Create an instance of the default Message Box then under "Buttons", select "Abort Retry Ignore", and then select "Retry Cancel".

The "Retry" and "Cancel" output pins are now reversed. That is, the one that says "Retry" fires if the user selects the Cancel button, and the reverse. Same deal for other button settings. The Message Box works OK if you only change the button selection once.

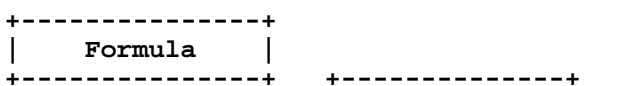
[*] FIXED IN VEE 5.0 / Odd Array-Recognition Bug

* We ran into an odd VEE bug, best illustrated by example with two small programs:



The single blue line indicates that VEE thinks the value is a scalar when it's an array ... serious trouble.

Workaround is to take a Concatenator object and pull off the second pin:



```
| [1, 0] AND 1 +-->| Concatenator +---+--->
+-----+ +-----+
```

[*] FIXED IN VEE 5.0 / Double Quotes In Pin Names

* A customer accidentally put double-quotes (") in the output pin of a Direct I/O object. It corrupts the program. worse, the customer can still save the program.

[*] FIXED IN VEE 5.0 / Setting Values In VEE Formula Causes Brb

* There was a limitation in setting values in a formula in VEE 4.0. If there was a record of 4-dim arrays, the following would cause a BRB:

```
data.freq[subgroup, type, device, index] = newValue
```

Setting values within a record worked for a 1-dim array, but any higher dims got the BRB. Values could be set in a 4-dim array if it wasn't a field of a record.

[*] FIXED IN VEE 5.0 / Sequencer Single-Step Wrongly Documented

* As of VEE 4.0, a user can no longer step through sequencer transactions. The lab guys said they yanked it out for VEE 4.0 (hard to get to work in compiled mode). We need to update the documentation.

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