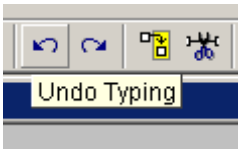
Agilent VEE Pro 7.0 New Features

Agilent VEE Pro 7.0 has some new features, such as the Property Grid and Microsoft Visual Studio .NET programmability, that make the VEE Pro 7.0 save format unique. Programs saved from VEE Pro 7.0 will not load into prior VEE versions.

Undo/Redo

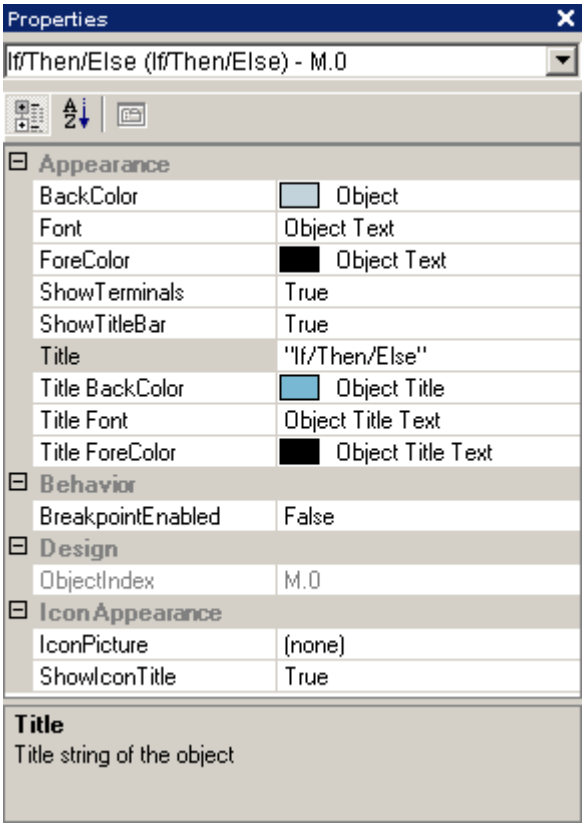
One of the most commonly requested features has been Undo. Both Undo and Redo operations will be supported in VEE for many common operations. Examples include: cut a line, delete a terminal, delete objects from a panel, paste objects, move an object, and many more.



See Undo and Redo

Object Property Editing

Using a property editing box similar to what is available in Visual Basic, VEE provides a Properties Window where you can easily change a host of properties for your VEE objects. It's simple and, in most cases, will be two clicks and you're done. It works when you select multiple objects (providing an "intersection" of properties for the two objects if they are different). It works on the detail view and panel view too!



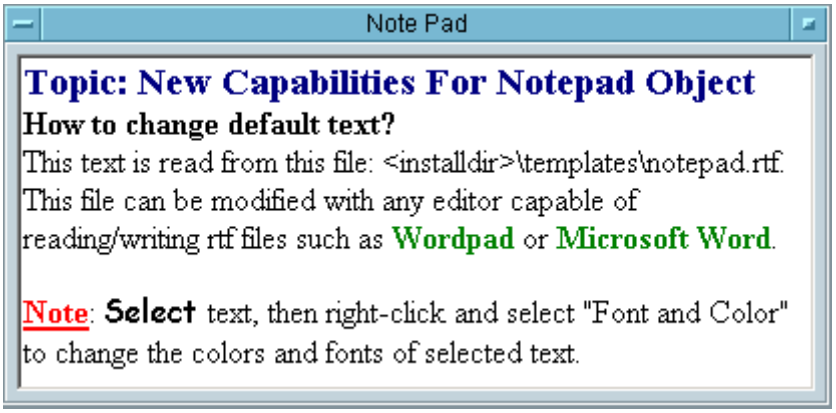
See Properties (Object)

Panel Edit Features

Editing objects on panels just got easier. The following have been added: a visible grid, alignment of objects, "rubber-band" selection of objects, undo of many common operations while building a panel, bring to front, send to back, tab order, and other features as well.

Rich Text Format for Notepad and Description

Editing notes, and descriptions is now much easier. Using the power of .NET, RTF has been implemented for these two. Additionally, the notes and descriptions contain automatic hyperlink detection and bring up a browser with the link you select. Both support undo (CTRL-Z) and redo (CTRL-Y) as well as all your other familiar editing short-cut keys. You can cut and paste from an .rtf file directly into a note or description and word wrap works also. Finally, you can create a custom template (default templates are templates\notepad.rtf and templates\description.rtf). These templates are retrieved whenever you create a new object from the menu. Of course, if you don't want a template, you can always remove it.



Programmatically Use .NET Assemblies

There are a great number of .NET classes available today, and there will be more in the future. Sometimes the functionality these classes provide is not available in VEE or is more desirable than what VEE offers. To make these valuable assets available to you, VEE 7.0 provides access to the Microsoft .NET Framework Library. This Library contains feature rich classes that you can use in a way similar to your use of ActiveX in VEE 5.x and above. See the examples in the DotNet examples directory to get some idea of the power of the .NET Framework to enhance VEE.

An additional feature is the ability to import namespaces. From the `Device > .NET Assembly References` menu, check the "Import namespaces after closing" checkbox. Choose one or more .NET Assemblies, and you will be prompted to select zero or more namespaces. You can also choose `Import .NET Namespaces` from the `Device` menu. What is the significance of this? Well, without a namespace import you might have to type System.IO.File.Exists(). With a namespace import, your method call looks like File.Exists(). Just a few clicks replaces a lot of typing.

A new type conversion function called asClrType has been added. This function converts a VEE data type to a .NET/CLR data type. The valid .NET/CLR data types include all of the primitive data types (Boolean, Byte, SByte, Int16, Int32, Uint32, Int64, Char, Double and Single), Decimal, DataTime, and String. asClrType is rarely needed as VEE converts between VEE and .NET data types automatically most of the time. For an example of VEE program using asClrType, please see examples\dotnet\datetime.vee.

See **Tell Me About > .NET Framework** in the Table of Contents

Connectivity for USB Based Instruments

Keeping VEE current with the newest Agilent instrumentation and competitive software products has always been a goal for Agilent. To this end, the I/O subsystem has been enhanced to accommodate instruments with a Universal Serial Bus (USB). Another feature of USB support is the ability to use USB aliases. USB aliases replace the long and awkward address string of USB addresses.

Connectivity for LAN Based Instruments

As stated in the USB connectivity paragraph, alternative connections to instrumentation are becoming standard. To adapt to these changes, VEE has been enhanced to provide connectivity for LAN-based instruments.

Use IVI-COM Drivers

IVI-COM is the latest standard for instrument compatibility. Established by the IVI Foundation, it encourages instrument manufacturers to produce instruments that are interchangeable with their competitors. To adapt to these new standards, VEE will accept all Agilent IVI-COM drivers and some third party IVI-COM drivers as well.

VEE interacts with IVI-COM drivers by finding a Primary Interop Assembly (PIA) for them. An assembly is an .EXE or DLL file and is the fundamental building block of a .NET application. The PIA is a .NET assembly that is provided by vendors for their COM based components. Since your IVI-COM driver is a COM based component, VEE will attempt to find a PIA for it. Once this is done, VEE lets you use the IVI-COM driver just like any other .NET assembly.

See What is IVI?

The Error Reporting Mechanism has Changed

Agilent has changed the VEE error reporting mechanism. Please take advantage of this valuable facility. See Minidumps for more information.

See Also

What's Been Fixed in this Release