VISUAL EXPERT

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I would strongly recommend you try Visual Expert out.

I am positive that you will find out that this tool is missing from your software library."

About the author

Katerina GIANNAKELI has been working for the past 2 years as a full time Senior Developer/Junior Analyst at the Research and Development department in a Software House located in Athens, mainly focused on client-server accounting and business applications, and building database driven applications both for WAP and PHP Web sites.

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Discover Visual Expert!

- **Impact Analysis**
- **Comprehensive Application Documentation**

"**Visual Expert should be a must-have on any software consultant's list**, and can provide a significant benefit to any user of the product regardless of the developers experience level with PowerBuilder."

www.novalys.net

Bill Green - Team Sybase

Summary

Visual Expert is a convenient and simple tool that manages to combine all the information regarding an application, no matter how big it is, and present it in such a way that even people not familiar with the application will gain a basic understanding of the application structure. New programmers would be able to find their way around easier, thus being able to participate actively in the development process sooner than it would take them if having to "track down" each object and all references.

There are many advantages of using Visual Expert that one to understand its full potential must get his hands on the tool itself and start exploring. It takes only a few minutes to familiarize you with the VE interface and even less to constructively review the application architecture, regardless its size.   I would strongly recommend you try Visual Expert out. I am positive that you will find out that this tool is missing from your software library.

Introduction

Visual Expert (VE) is a product that allows the user to perform the following tasks easily:

- Impact Analysis
- Source Code Documentation
- Application Browsing / Inspection

It is useful for the newly introduced to the application programmer and/or others to obtain a global overview of the application's structure and the references between all objects, thus familiarizing him with the application.
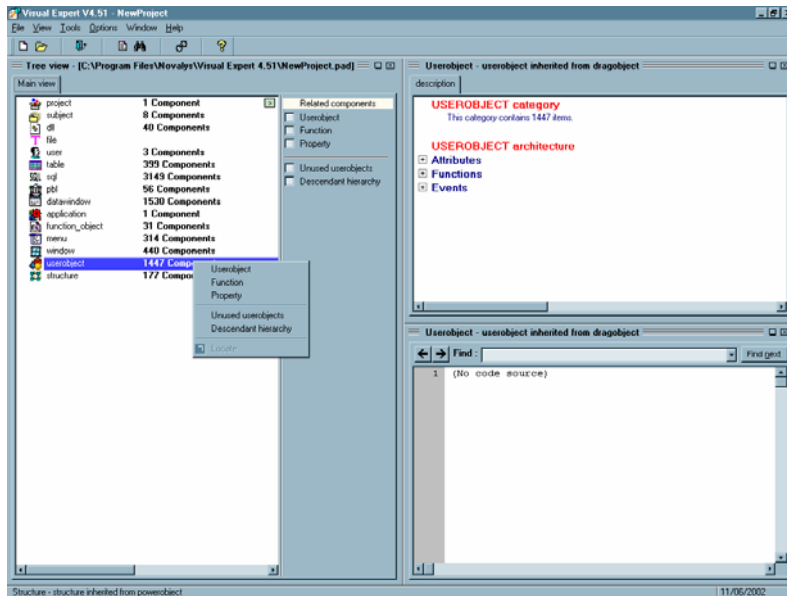
VE allows the user to inspect the application structure (code, objects, components, functions, DLLs, variables, SQLs, DataWindow, menus, etc.), cross-reference ALL objects and globally search for a specific string in the application, and provide information on a visual and document basis.

By performing Impact Analysis the user is able to evaluate the impact an under-consideration modification will have, and decide whether it is feasible to apply such a modification to the application.
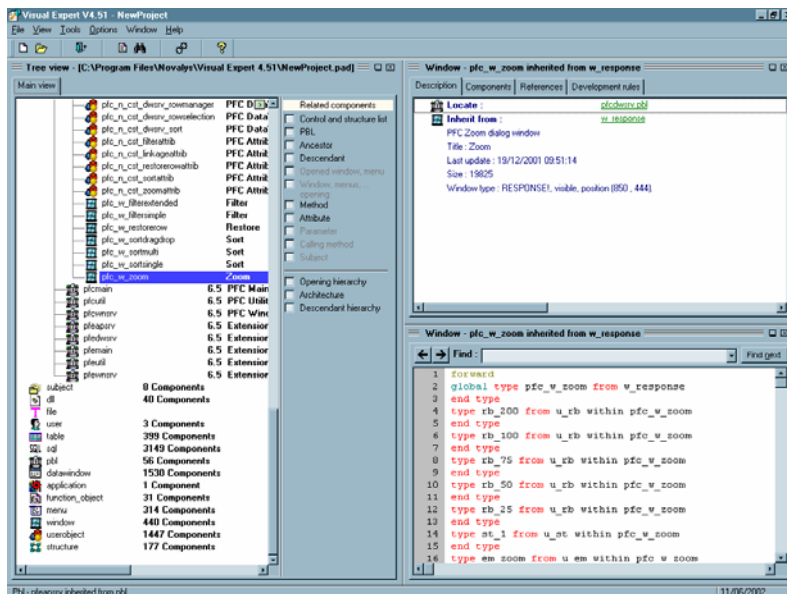
VE also provides the ability to create your own coding standards and rules, so as to ensure integrity is maintained throughout the development process of your application, and to optimize the application by removing any unused objects/variables or adding comments to the code etc.

You have the possibility to save each application layout in a .PAD file which you may view later and when migrating from one version of VE to another, to easily migrate the .PAD file, without having to create a new file.

The interface of the tool has been efficiently designed and allows you to navigate through all objects without difficulty or losing track of your position. With single clicks you may view all information about a specific object or navigate through the treeview (see below picture) to locate the exact position of the each component within an object (if referenced) or the actual position of the object itself.

The above picture shows the main screen of VE. It is consisted on the left side of the tree view that contains all components found within the application, divided into 15 main categories. By double clicking or right clicking on each category you may explore the components related to this category, e.g. the *window* category includes all window objects within the application (all PBLs). To locate the actual position of a window, all you have to do is right-click on the desired window and either select *PBL* or select *Locate.* The latter would redirect you to the PBL category, expanding it and highlighting the object you requested to locate, whereas the first would display underneath the window the referencing PBL it corresponds.

On the top right side of the screen there is displayed important information about the object selected. Some of the information is also displayed by accessing the menu by right clicking on the desired object, or by (un) checking the checkboxes in the middle of the screen, which also allows you to filter the depth of information you wish to view. For example, one may need to view only such objects that are not used at all within the application.
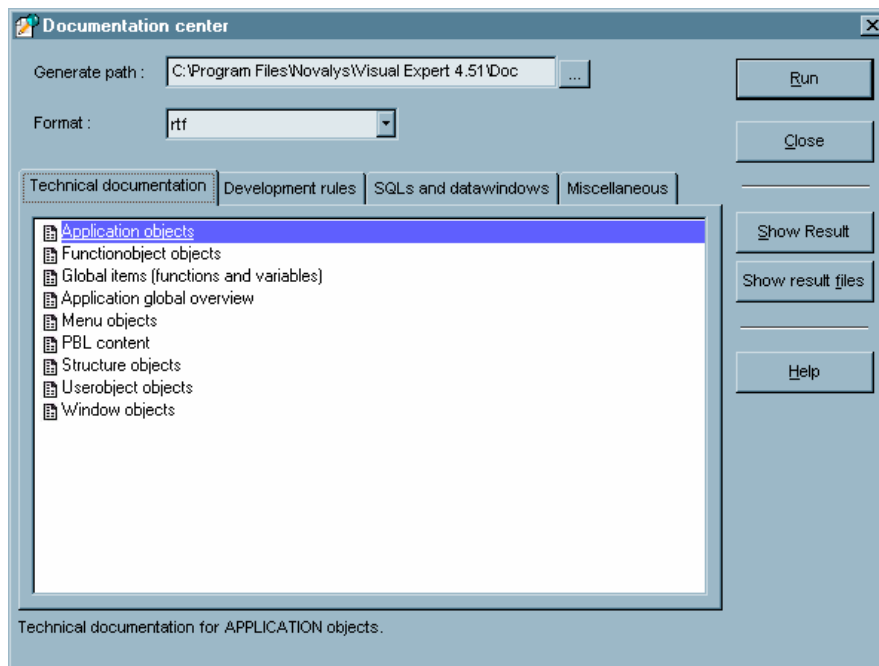
Apart from that, one may view all references made to / from other objects, all components included in the object and get a detailed statistical analysis of the usage of variables, functions, etc. One important feature is the information

provided about the unused variables and other objects in general, which has been an important issue for everyone during development (and afterwards).

Deletion of unused variables and objects can improve significantly the performance of an application – most, not to say all, applications contain such garbage which are difficult to trace.

On the bottom right side of the screen is displayed the code and other declarations that exists within the selected object (from the treeview on the left side of the screen), as well as complete SQL statements deriving from DataWindows.

Apart from viewing information on the screen, you have the option of creating various documents in printable format (RTF and HTML) that are easily browsable and readable. The creation of the documents in made at the Documentation Center
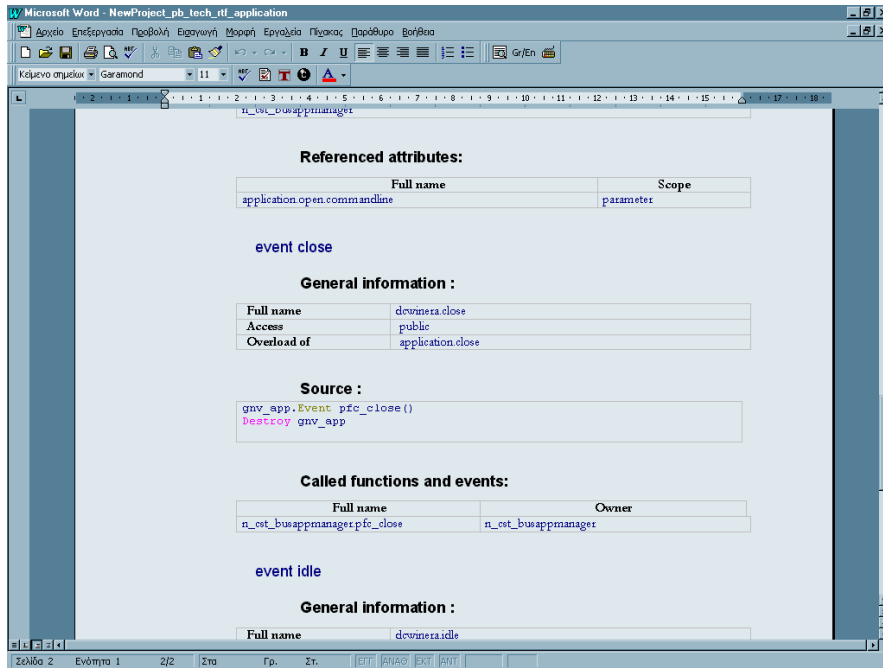

(see picture below).

As with the visual display of the application architecture, document templates available are divided in categories to help choosing the most appropriate one, depending on your needs easily. The main categories you may choose to create documents from are:
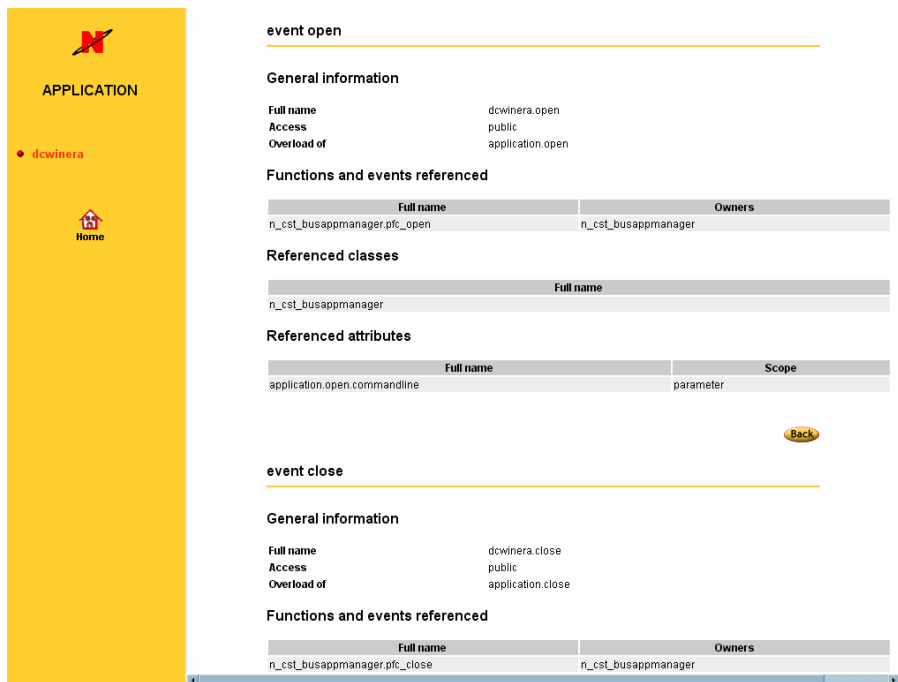
- **Technical Documentation** : Includes document templates for listing objects per category type, as listed in the treeview
- **Development Rules:** Includes templates for all naming conventions and rules used, as well as Euro and Y2k checking.
- **SQLs and DataWindows:** Includes document templates for all SQLs included in the application.
- **Miscellaneous:** Includes various document templates such as windows screenshots and application hierarchy.

By selecting the desired document and clicking on *Run*, VE will create the document and store it in the folder displayed. Should you desire to view the document without exiting VE, you click on *Show Result* which will open MSWord or I.E. for example, depending on the format you chose the document to have (RTF or HTML respectively).

A document in RTF will look like this:

A document created in HTML will look like this:

As you may see, both documents have a carefully designed look and structure that allows you to review the material easily and redistribute them to others, saving valuable time if you tried to create such documents from scratch.

Conclusion

Visual Expert is a convenient and simple tool that manages to combine all the information regarding an application, no matter how big it is, and present it in such a way that even people not familiar with the application will gain a basic understanding of the application structure. New programmers would be able to find their way around easier, thus being able to participate actively in the development process sooner than it would take them if having to "track down" each object and all references.

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More about Visual Expert

In order to receive a free Evaluation Version:
http://www.novalys.net/info/demande_evalVE.htm

For other information about Visual Expert: http://www.novalys.net/ref/visualexpert.htm

About the Author

Katerina GIANNAKELI

"I am 25 years old and I am from Athens, Greece. I hold a Bsc (Hons) in computing which I obtained after four years in England, and an Msc in Computing, for which I am currently studying via Distance Learning at an American University.

I've been working for the past 2 years as a full time Senior Developer/Junior Analyst at the Research and Development department in a Software House located in Athens, mainly focused on client-server accounting and business applications, and building database driven applications both for WAP and PHP Web sites.

I have also worked for a year, as a Group IT Manager Assistant at the Head Office of a Multinational Manufacturing company based in England, dealing with all IT managers from all companies within the group."