

INTRODUCTION

Ever joined a project in which the application was written by someone else?

If you have, you know how difficult is then to make modifications in the code.

What is this application doing? Which functions are affected if I make changes to a table?

We're talking about Impact Analysis, something we often don't do because it's simply too much work to do it. Performing a thorough impact analysis on a large application would take several times longer than the change being requested.

Should we do it? Of course.

Any amount of time spent before physical changes translate to lower risk of a problem appearing when the modified application goes into production. If only there was a tool that would do the time-consuming drudgework we all hate so we could make better decisions and get changes into production more quickly with less risk.

NOW YOU CAN! Visual Expert for PL/SQL, an analysis product from NOVALYS, is a product that allows the user to perform the following tasks easily:

- Navigation in the application
- Impact Analysis

By performing Impact Analysis the user is able to evaluate the impact an under-consideration modification of some PL/SQL code will have, and decide whether it is possible to apply such a modification to the application.

Visual Expert for PL/SQL is useful to obtain a global overview of the application's structure and the references between all components.

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NAVIGATION IN THE APPLICATION

The interface of the tool has been efficiently designed and allows you to navigate through your PL/SQL code (packages, functions, procedures, blocs, triggers..) without difficulty or losing track of your position, no matter how complex the application is. With only a few clicks you may view all information about a specific component.

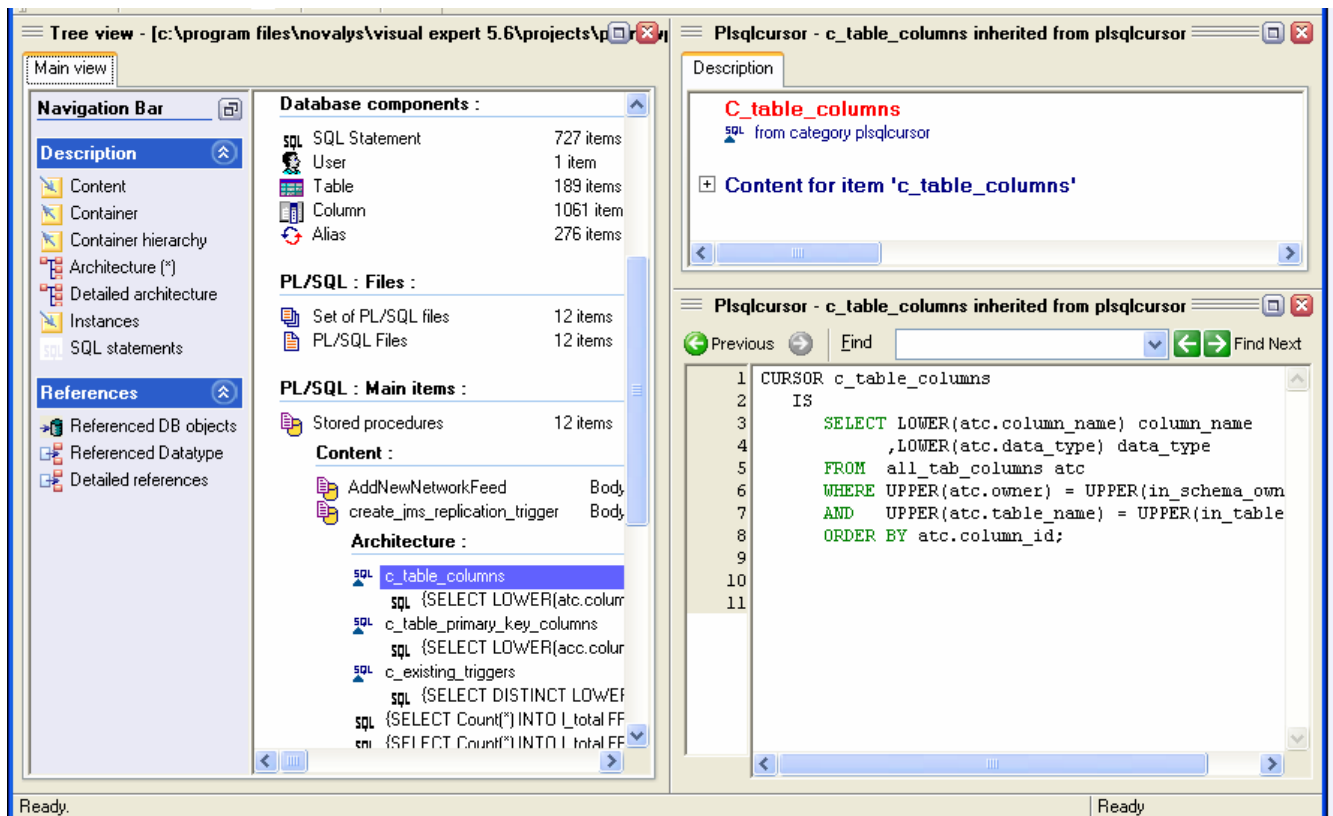


Figure 1 – Visual Expert for PL/SQL-main screen

The picture shows the main screen of Visual Expert for PL/SQL. The treeview contains all the components found within the application. By double clicking on each category, you may explore the components related to this category, e.g. the stored procedures. By double clicking on the stored procedures, you can see its contents and its code (on the bottom right side of the screen).

The collection of top level items gives you a route to take and developers will quickly find the navigation intuitive and quite flexible.

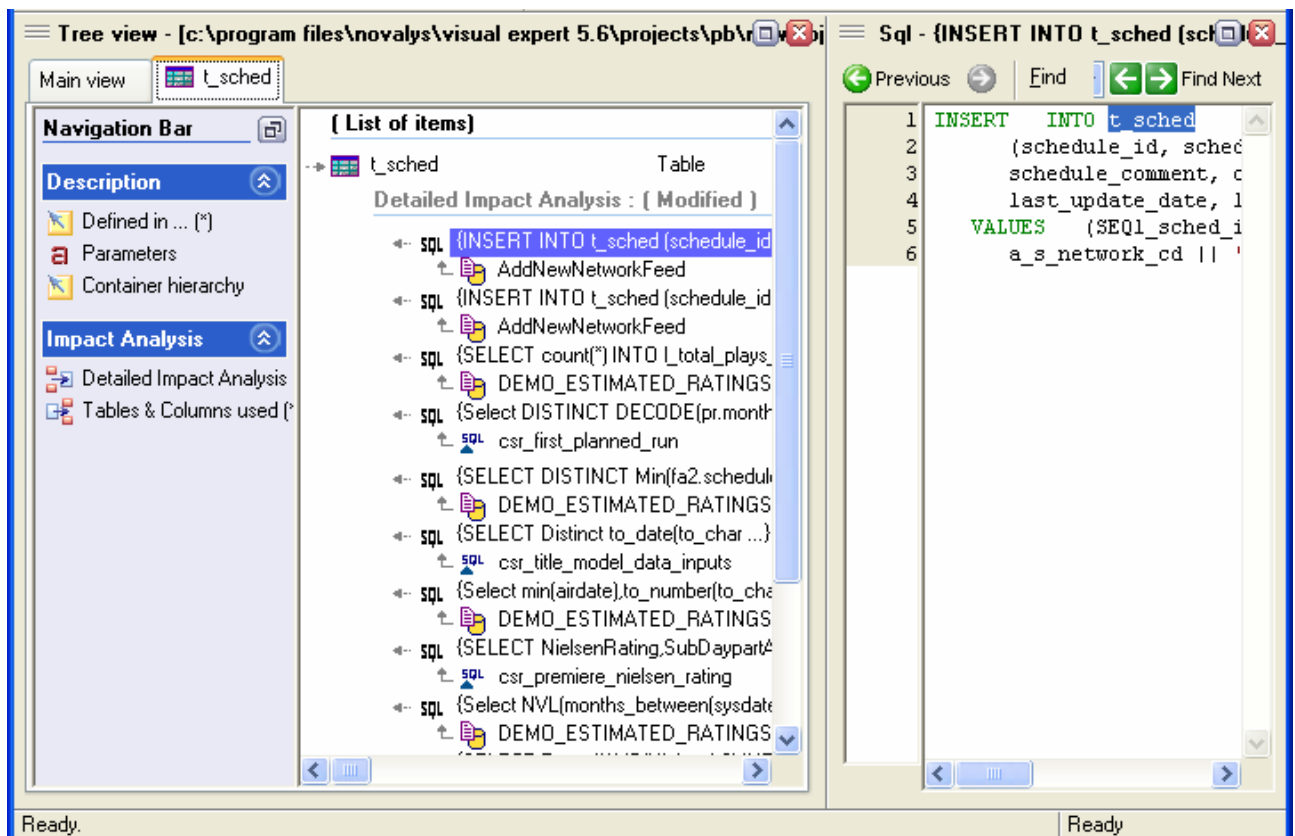
On the top right side of the screen there is displayed important information about the component selected. Some of the information is also displayed by checking/unchecking options in the navigation bar (on the left side of the screen), which also allows you to filter the depth of information you wish to view.

You can also peek into the architecture of the component, and as each option is selected, the treeview expands with additional entries, each of which has an additional set of options.

IMPACT ANALYSIS

When you modify some PL/SQL code of the application, a table or a column there is always a risk of regression and errors due to the modifications.

Visual Expert can list all components related to this item to help you evaluate the consequences of a change. For instance, you can ask for all triggers, cursors, functions and procedure including SQL statements using a DB column, as well as a % rowtype definition.



**Figure 2 – Visual Expert for PL/SQL-Impact Analysis on a table.
SQL code is displayed in the source code view on the right**

As you can see in figure 2, by selecting a table (for example) and clicking on “Detailed Impact Analysis” Visual Expert for PL/SQL shows you the SQL statements that refer to the table selected (on the treeview), the location of your table and its code (on the right side of the screen).

This helps when you want to change your application. In fact, you can find out immediately all the possible impacts of your change on other components of the application. This guarantees you from unexpected “surprises” that can become a nightmare when you start to work with a new, complicate, and especially poorly designed application.

In case you developed PowerBuilder applications, any PowerBuilder-to-PL/SQL reference is also taken into account as shown below.

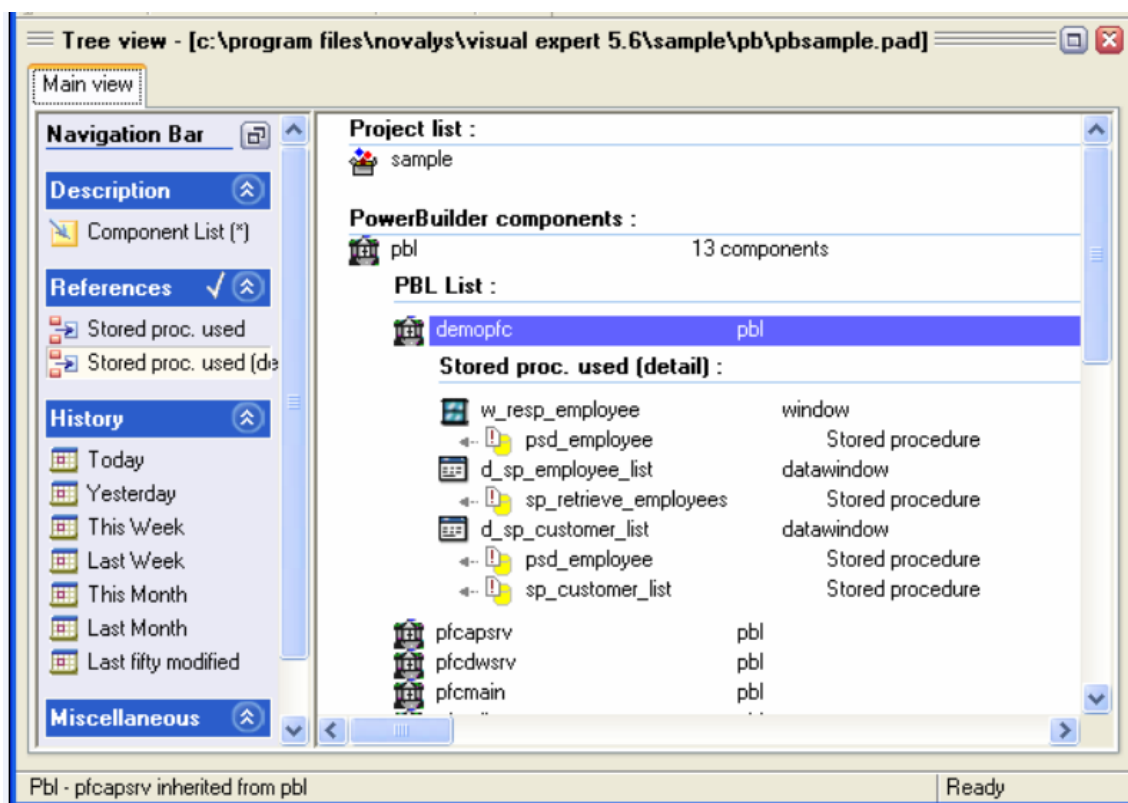


Figure 3 – Visual Expert for PL/SQL: PowerBuilder-to-PL/SQL reference

The picture shows that Visual Expert for PL/SQL can list all components related to the item you've selected, even when your application is written in both PL/SQL and PowerBuilder. e.g if you select a PBL, Visual Expert for PL/SQL can show you all the stored procedures used in this PBL. Moreover, it also displays which PowerBuilder object is using each stored procedure.

CONCLUSION

Given our propensity as developers to avoid any task that takes too much time to perform and make changes to applications relying on our testing practices to determine the impact, it's my opinion that this tool would go a long way to making our jobs less risky. It will help to reduce the risk of change to any application.

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.

Moreover, it takes only a few minutes to familiarize you with the Visual Expert for PL/SQL interface and even less to constructively review the application architecture, regardless its size.

MORE ABOUT VISUAL EXPERT FOR PL/SQL

For further information about Visual Expert for PL/SQL:

http://www.visual-expert.com/us/info/detailed_features_plsql.htm

In order to receive a free Evaluation Version :

http://www.visual-expert.net/request/request.php?TEMPL=eval_request_us.htm