

PowerDesigner 15 First Impressions

Written by Jay Stevens

Thursday, 18 September 2008 10:45 - Last Updated Friday, 03 October 2008 09:04

The PowerDesigner 15 beta just ended last week. This means we are getting close to the release of PD 15. I still have good friends in the PowerDesigner marketing, sales, engineering and support organizations so I have an unfair advantage when it comes to finding out what is coming next in the PowerDesigner product. Most of you, I realize, do not have these kinds of contacts. Even with these contacts I have found that the best way to get a head-start on new PowerDesigner versions is to get on the PowerDesigner Beta mailing list and participate. For years I helped manage the beta process for PowerDesigner, but for the last 4 years it has been one of my primary methods for discovering PowerDesigner futures. Here are some of my arguments for joining the beta:

- PowerDesigner has historically been extremely stable in beta releases - Few if any crashes. I did not have any this beta cycle that I can blame on PD.
- PowerDesigner releases play well with prior versions of the product. I am currently running on one laptop PD 11, 12.5 and 15 and they do not step on each other. The only caveat to this is you need to maintain different versions of your models. I create folders for the different versions.
- The process gives me an opportunity to provide feedback to Sybase. Things not working, enhancement requests and usage aggravations.
- The beta program is usually accompanied by supporting information like webcasts, testing guidelines and documentation
- Newsgroup support specific to the beta release
- I can choose how much time to invest in the new version. If the new version has something I am particularly interested in, then I spend more time. If not I at least can get an overview of new features.

When I start to review what is new in PowerDesigner 15 I am overwhelmed by exactly how much has been added in this version. Here is a summarized list of just the major areas of the product that have been enhanced. I can not guarantee that all of these will make the final released version.

- New Enterprise Architecture Model
- The EA Business Layer
- Organization Chart
- Process Map
- City Planning Diagram
- Business Communication Diagram

- The EA Application Layer
- Application Architecture Diagram

- Service Oriented Diagram

- The EA Infrastructure Layer
- Technology Infrastructure Diagram

- Projects and Framework support
- Data Modeling enhancements
- New separate Logical Data model
- Barker Notation
- New Database support
- Wizard to transform PDM - PDM mappings into Information Liquidity models

- Impact Analysis
- Impact Analysis diagram
- re-written Impact Analysis engine
- Support for lineage as well as impact

- Import Visio models
- Improved Auto Layout

In this post I can only scratch the surface of all of these enhancements, but here are some comments on enhancements that impact me personally.

Logical Data Model

Sybase has decided to separate the Logical model into its own standalone module as opposed to being a target in a Physical Data Model. In most cases I was able to work with the old logical model by selecting the physical objects which were important to my clients and get a result that was close. This approach was always a bit frustrating because your logical model ended up being represented with physical objects, i.e. Tables and References. The new Logical model is more appropriately based on the Conceptual model with the addition of Many-to-Many relationships, foreign key migration but retains the inheritance object. This makes the logical model much more usable.

Impact Analysis

PowerDesigner 15 First Impressions

Written by Jay Stevens

Thursday, 18 September 2008 10:45 - Last Updated Friday, 03 October 2008 09:04

In version 12.5, the results of an impact analysis was a list of objects that were impacted by a specified change to a parent object. This list could be represented as a tree or a list. This wasn't bad, but in large results it was often difficult to see exactly what the impact was, so you would spend time expanding and contracting the tree or adjusting the propagation rules to get the desired result. With PD 15, Sybase has re-written the Impact analysis engine. The new engine support what they now call Analysis Rule Sets, which are propagation rules on steroids. First of all there are many of these depending on types of change and desired results. These can be customized and / or new ones created. Next they have added support for Lineage, which is analysis of an objects parents not just its children. Lastly you can now take the results of an impact analysis and generate an impact analysis diagram. This is a visual representation of the analysis which can be saved, reported on, and compared against other impact analysis diagrams. This is extremely helpful in determining the cost of making a change.

Enterprise Architecture Model

This new module adds a set of new diagrams that will be very useful in documenting high level specifications and structures. If you were using the PD Free model, Visio, Powerpoint, Word documents or something else to communicate your high level designs, these new diagrams will bring more of the modeling functionality under one tool. The benefit of this is PD's ubiquitous link and synch technology which enables you to document dependencies between all levels of modeling diagrams and objects. I have already told two of my clients that they need to investigate this new functionality to alleviate some of their work-arounds that were needed in PD 12.5

Auto Layout

I seem to spend a good part of my time reverse engineering database and then trying to clean them up enough to be useful. The old auto layout was basically useless especially once you got larger than about 20 objects. PD 15 has significantly enhanced the auto layout logic to the point were it is actually helpful. The best part about the new logic is it provides options for the type of layout to attempt. So I can try a hierarchical, circular, orthogonal or tree layout and decide which one I like best. Different layouts work better with different object structure. I provided Sybase engineering with some large data models to test the new layout logic. It is starting to look like auto layout may actually become usable.

Projects and Frameworks

I have not spent much time with this new enhancement so I will just give some general impressions. At first glance it looks like a Project is a new model which contains as its primary objects other models. This allows us to define all the models that we need in order to complete a specified development project. In addition you can apply a Framework Matrix to a project which lets you specify the deliverables required to support your framework standard. This

PowerDesigner 15 First Impressions

Written by Jay Stevens

Thursday, 18 September 2008 10:45 - Last Updated Friday, 03 October 2008 09:04

allows you to work through the process with the assistance of the project. For example my framework says I need a Conceptual model, a logical model and a physical model. I go to my project, right click on Conceptual and it gives me the option to build a new Conceptual. When that is finished, in my project again I select the logical model task and the option to generate from the conceptual model is provided. I have not worked through all the details, but it has potential.

There are many additional enhancements which I have not really investigated yet, but as I get to them I will either add to this post or create new ones. So far I am very impressed with what I have seen. It still comes down to how fast I can do the work I need to do. PD has always been good about not forcing me to use any new features. I can try a new feature, if it helps implement it, if it does not then skip it.

Have a good one

Jay