Sybase® PowerDesigner® DataArchitect® for Microsoft SQL Server

Sybase® PowerDesigner® DataArchitect® 15, a model-driven approach to aligning business and IT, is an enterprise modeling and design solution that helps you implement effective enterprise information architecture and brings powerful analysis and design techniques to your business and implementation initiatives. PowerDesigner uniquely combines several data modeling techniques (traditional conceptual, logical and physical modeling with unique business intelligence and data movement modeling) to bring business analysis together with formal database design solutions. And it works with over 60 RDBMS.

Sybase PowerDesigner DataArchitect provides Microsoft SQL Server Data Analysts, Database Developers and Database Administrators complete control over the enterprise's information architecture. PowerDesigner DataArchitect provides unmatched analysis capabilities, from the Requirements Model importing and exporting Word based requirements documents to our Conceptual, Logical and Physical models for multiple layers of abstraction. Tied into this is PowerDesigner DataArchitect's customizable database generation and reverse engineering engine that creates completely accurate DDL for all supported versions of SQL Server databases and provides robust round-trip capabilities.

POWERDESIGNER DATA ARCHITECT SQL SERVER SPECIFIC FEATURES

PowerDesigner DataArchitect supports the unique capabilities of SQL Server by extending its complete support for traditional data analysis and design features. PowerDesigner DataArchitect reverse engineers and generates SQL Server specific artifacts such as indexed views with encryption options, partitioned table storage, multiple file definitions for filegroups, definitions for filestream and compression, and SQL Server specific unique controls for Row Global Unique Identifier, constraint and collation names, Identity properties and replication settings for constraints (“Not For Replication”). PowerDesigner DataArchitect also has complete round-trip engineering support for Microsoft Analysis Services including cubes.

POWERDESIGNER DATA ARCHITECT BENEFITS

The safe choice: PowerDesigner DataArchitect’s market proven commitment to innovations in Data Modeling and Enterprise Information Architecture make it the safe choice for all information modeling requirements. PowerDesigner DataArchitect is a standard in many organizations worldwide.

Graphical ease of use: PowerDesigner DataArchitect’s highly customizable user interface makes common tasks easy while empowering advanced users rapid access to all features.

Align business and IT: PowerDesigner DataArchitect facilitates Business and IT alignment through team collaboration using unique Link and Synch technology between all levels of abstraction. Business alignment is also achieved through integrated requirements models.

Improve individual productivity: PowerDesigner DataArchitect’s model-driven approach features a series of customizable DDL generators, reverse engineering and database synchronization capabilities that significantly reduce manual DDL creation, maintenance and re-engineering efforts.

Microsoft SQL Server 2008 Partition Definition
POWERDESIGNER MODULAR PACKAGING

PowerDesigner is available in the following modular configurations:

- **DataArchitect**™ – Addresses the needs of the most discriminating Data Modelers and DBAs. DataArchitect offers requirements management and full data analysis and comprehensive multi-level design techniques with round-trip engineering and detailed design capabilities for over 60 RDBMS vendor/versions.

- **DataArchitect Enterprise** – Includes one Enterprise Repository connection for each user. Purchase or upgrade to an “Enterprise” version of DataArchitect for each seat you want to have collaborate as part of a connected team.

- **Viewer** – Addresses the need for documentation teams, higher-level technical managers or other users to access all of the PowerDesigner tools without requiring a full PowerDesigner license. Viewer is a read only tool that can access any PowerDesigner model, retrieve any model from the Enterprise Repository, print models, and create reports. Viewer is available free of charge from http://response.sybase.com/forms/PowerDesignersViewer.

**POWERDESIGNER DATA ARCHITECT KEY FEATURES**

**Requirements Management:** Detailed requirements analysis linked to all models for traceability. Import and synchronization with Microsoft® Word places the business users directly into the analysis and design lifecycle.

**Document Generation:** Wizard driven list, multi-model RTF and fully hyperlinked HTML document reporting provides any non-modeling user direct, controlled access to metadata. This fosters greater communication among all members of the project team.

**Conceptual Data Modeling:** Conceptual data models based on Information Engineering (IE), Barker or IDEF 1/x notation provide a database and technology independent business representation of data concepts and core relationships. Conceptual data models iteratively generate into one or more logical and physical data models based on desired levels of abstraction and approaches to information architecture from a common business view.

**Logical Data Modeling:** Logical data models based on Information engineering (IE), Barker or IDEF 1/x notation provide database independent relational structures for use by developers and designers for optimization and understanding. Logical data models can be developed independently or generated from conceptual data models. Logical data models can generate to one or more physical data models.

**Physical Data Modeling:** Physical data models based on Information Engineering (IE) or IDEF 1/x notation document, generate and reverse-engineer structures for over 60 RDBMS (including the latest Oracle®, IBM®, Microsoft, Sybase, NCR Teradata®, MySQL® and many more). Support includes all database artifacts and new techniques such as Java, XML and Web Services in the database, security modeling, advanced techniques for views and more.

**Data Warehouse Modeling:** Multidimensional Diagrams document the OLAP environment by representing cubes, facts, dimensions, dimensional hierarchies and queries independent of the physical table structures used to store the warehouse or data mart information. Together with the data mapping editor, more sophisticated data movement modeling (described below) the complete business intelligence architecture from source definition, transformation, warehouse, mart and reporting environment can be completely documented. This provides for clear impact analysis and design time change management of any aspect of the BI environment.

**XML Modeling:** XML specific modeling techniques to document generate and reverse engineer XML Schema and XML DTD structures. The XML models are mapped to data models to document XML/Relational mappings as well as for definitions of XML in the database or RDBMS engines that support this concept.

**Data Movement Modeling:** A PowerDesigner exclusive, the Information Liquidity Model (ILM), documents all aspects of information movement. Source data stores, target data stores, multiple transformations, publication and subscription serve to document any ETL, EII or replication process.

**Enterprise Information Architecture:** PowerDesigner’s unique Link and Synchronize technology allows users to document all dependencies from Requirements to UML, Data and Business Process. All dependencies are tracked automatically through inter-model generation and synchronization techniques. All external deliverables are 100% synchronized to their respective models. Measure the complete impact of a change made anywhere in the development lifecycle and streamline the management of that change across the enterprise.

**Impact Analysis:** Models are fully integrated using unique Link and Synch technologies. Models integrate across all model types for complete enterprise-wide or project-wide impact analysis. Impact analysis streamlines communication and collaboration to dramatically increase the entire organization’s responsiveness to change.

**Customizable:** Optimize productivity by controlling everything from the user interface to the way PowerDesigner manages modeling tasks and generates code.

**Integrated:** Plug into Eclipse, Microsoft Visual Studio® and PowerBuilder® for seamless integration to leading development environments and synchronize models and code automatically. Plug-in supports all modeling techniques and requirements management. Requirements integrate with Microsoft Team System.

**Enterprise Repository:** A fully integrated design-time repository, hosted by your choice of relational database. As a highly scalable centralized metadata management facility, the Enterprise Repository offers capabilities like: Role-based security on models and sub-models, version control, configuration management, version compare and comprehensive search capabilities. The repository may also store and manage any documents important to your projects. New repository notifications ensure all users have the latest metadata available and take appropriate actions based on changes committed to the server.